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Number 69

# The Protection of Corn, November 1984— April 1988

## Citations from AGRICOLA Concerning Diseases and Other Environmental Considerations



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September 1988

# **The Protection of Corn, November 1984— April 1988**

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Considerations

Compiled and Edited by Charles N. Bebee  
National Agricultural Library



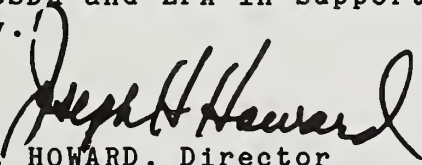
## FOREWORD

This is the 22nd volume in a series of commodity-oriented environmental bibliographies resulting from a memorandum of understanding between the U.S. Department of Agriculture, National Agricultural Library (USDA-NAL), and the U.S. Environmental Protection Agency, Office of Pesticide Programs (EPA-OPP).

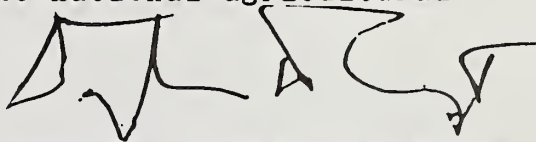
This close working relationship between the two agencies will produce a series of bibliographies which will be useful to EPA in the regulation of pesticides, as well as to any researcher in the field of plant or commodity protection. The broad scope of information contained in this series will benefit USDA, EPA, and the agricultural community as a whole.

The sources referenced in these bibliographies include the majority of the latest available information from U.S. publications involving commodity protection throughout the growing and processing stages for each agricultural commodity.

We welcome the opportunity to join this cooperative effort between USDA and EPA in support of the national agricultural community.



JOSEPH H. HOWARD, Director  
National Agricultural Library



DOUGLAS D. CAMPT, Director  
Office of Pesticide Programs



The citations in this bibliography are selected from works by U.S. authors on the protection of corn. All citations are derived from AGRICOLA (AGRICultural OnLine Access), the database compiled by the National Agricultural Library.

This is the 22nd bibliography included in a series jointly sponsored by the National Agricultural Library, U.S. Department of Agriculture (USDA-NAL), and the Science Support Branch, Benefits and Use Division, Office of Pesticide Programs, U.S. Environmental Protection Agency (EPA-OPP). Recent volumes in this series include The Protection of Sugarcane and Sugar Beets. Bibliographies planned for the current year include Plant Growth Regulators, The Protection of Hays, The Protection of Citrus, The Protection of Turf Grasses, The Protection of Root Vegetables, The Protection of Leaf Vegetables, and The Protection of Rice.

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Food Service Management	1903
Diet and Diet Related Diseases	1904
Pollution	1905-1918
Mathematics and Statistics	1919-1934
Documentation	1935
Human Medicine, Health and Safety	1936-1939
Technology	1940-1944



# EPA BIBLIOGRAPHY

## RESEARCH

0001

Experiment station work, LVII a perfect stand of corn, fleshing horses for market, protection of seed corn, fertility and hatching of eggs, clover-seed production, marketing of eggs, home-grown feeds for hogs, cement silos /prepared in the Office of Experiment Stations. Washington, D.C. : U.S. Dept. of Agriculture, 1910. Cover title.~ "Compiled from the publications of the agricultural experiment stations.". 32 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.405).

0002

Experiment station work, XXVII hen manure, soft corn, nitrate of soda for field crops, hay substitutes, varieties, culture, and quality of wheat, oak leaves as forage, breeding corn, the covered milk pail, quality of irrigated crops, canning cheese, shading strawberries and vegetables, millet seed for hogs, injuries to shade trees, fertilizers for potatoes /prepared in the Office of Experiment Stations. Washington : U.S. Dept. of Agriculture, 1904. Cover title.~ "Compiled from the publications of the Agricultural Experiment Stations.". 32 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.210).

0003

Experiment station work, XLIV distributing manure and fertilizers, cooking cereal foods, silage making, winter killing of peach buds, horse-feeding tests, color of apples, supplements to corn for hogs, ringing herbaceous plants, tankage for hogs following cattle, potato scab, gas injury to trees, hoppers for poultry feeding, the tuna or prickly pear /prepared in the Office of Experiment Stations. Washington : U.S. Dept. of Agriculture, 1908. Cover title.~ "Compiled from the publications of the agricultural experiment stations.". 32 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.316).

0004

Some preliminary results of estimating the impacts of research investment on corn, wheat and sorghum. MXMRA. Otto, D. Havlicek, J. Jr. St. Paul, Minn. : The Station. Extract: The objective of this study is to further disaggregate these commodity groupings of Bredahl and Peterson into individual commodities and to begin investigating the impact of interregional research "spillovers." Case studies of corn, wheat, and sorghum are made, using individual states as observation units over the time period for which research data on individual commodities are available. The empirical results presented in this paper are the results of some first attempts at estimation. Further work is being done to improve specification of variables measuring weather, cash inputs, risk, and other factors influencing yield response of grain commodities. A special cross sectional-time series algorithm is used in parameter estimation. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. Papers presented at a Symposium sponsored by NC-148, Minneapolis, MN, May 12-13, 1980.~ Includes statistical data. May 12-13, 1980. (8-1981). p. 71-75. Includes 12 references. (NAL Call No.: DNAL S1.M52).

# METEOROLOGY AND CLIMATOLOGY

0005

**Corn soil insects research--1985 insecticide evaluations.**

MAERA. Grundler, J.A. Keaster, A.J. Columbia : The Station. Special report - University of Missouri - Columbia, Agricultural Experiment Station. Includes statistical data. Nov 1985. (336). 37 p. (NAL Call No.: DNAL 100 M6935P).

0006

**Quantitative measurements of mefluidide protection of chilled corn plants.**

JOSHB. Tseng, M.J. Zhang, C.L.; Li, P.H. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. May 1986. v. 111 (3). p. 409-412. Includes references. (NAL Call No.: DNAL 81 S012).

0007

**A soil primer: compaction causes and effects.**

CRSDA. Voorhees, W.B. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Dec 1986. v. 40 (3). p. 8-9. (NAL Call No.: DNAL 6 W55).

0008

**Stalk lodging in corn: guidelines for preventive management.**

Nielsen, B. Colville, D. West Lafayette, Ind. : The Service. AY - Purdue University Cooperative Extension Service. Dec 1986. (262). 4 p. (NAL Call No.: DNAL S544.3.I6P82).

0009

**Technological advance, weather, and crop yield behavior.**

Offutt, S.E. Garcia, P.; Pinar, M. West Lafayette, Ind. : Purdue University. North Central journal of agricultural economics. Jan 1987. v. 9 (1). p. 49-63. Includes references. (NAL Call No.: DNAL HD1773.A3N6).

0010

**Temperature and precipitation in relation to the number of generations of European corn borer in the United States /by K.D. Arbuthnot.**

Arbuthnot, K. D. 1902-. Washington : U.S. Dept. of Agriculture, 1949. Caption title. 22 p. : ill., maps ; 23 cm. Literature cited: p. 21-22. (NAL Call No.: DNAL 1 Ag84Te no.987).

0011

**The use of trajectory analysis in projecting the long range migration of the black cutworm (Lepidoptera: Noctuidae) moth into the Midwest.** Smelser, R.B. Shaw, R.H.; Showers, W.B. Boston : The Society, 1985. 17th Conference on Agricultural and Forest Meteorology and seventh Conference on Biometeorology and Aerobiology, May 21-24, 1985, Scottsdale, Ariz. : preprint volume / sponsored by the American Meteorological Society. Pest of seedling corn in Iowa. p. 288-291. maps. Includes references. (NAL Call No.: DNAL S600.2.C6 1985).

# U.S. EXTENSION SERVICES

0012

references. (NAL Call No.: DNAL 1 Ag84F no.267).

Experiment station work, XXVI reclamation of flood damaged lands, fruit for farm animals, protein for dairy cows, mulching vegetables and fruits, cost of raising calves and pigs, the cultivation of orchards, manufacture of sage cheese, thinning apples, manufacture of cottage cheese, pop corn, a cheap fruit evaporator /prepared in the Office of Experiment Stations. Washington : U.S. Dept. of Agriculture, 1904. Cover title.~ "Compiled from the publications of the agricultural experiment stations.". 32 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.202).

0013

Experiment station work, XXIX injury by smoke and gases, tomato growing, fertilizer mixtures, influence of feed on milk, flint varieties of corn, protecting cows from flies, buying and judging seed corn, experiments with turkeys, tobacco seed, mineral matter for chickens, cowpea seed, brooder heat, treating seed oats for smut, American camembert cheese, potato culture, swelling in canned peas /prepared in the Office of Experiment Stations. Washington : U.S. Dept. of Agriculture, 1905. Cover title.~ "Compiled from the publications of the Agricultural Experiment Stations.". 32 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.225).

0014

Experiment station work, XXXV use of commercial fertilizers, asparagus rust and its control, weight of lime per bushel, alfalfa meal as a feeding stuff, spreading lime, singed cacti as forage, soil sterilization, cattle feeding in the South, weights per bushel of seeds, milk fever, disease resistant crops, nail wounds in horses' feet, corn billbugs and root-louse, use of a cheap canning outfit /prepared in the Office of Experiment Stations. Washington : U.S. Dept. of Agriculture, 1906. Cover title.~ "Compiled from the publications of the agricultural experiment stations.". 32 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.259).

0015

Experiment station work, XXXVII breeding corn, grass mulch for orchards, buckwheat, hardiness of young fruit trees, sugar beets on alkali soils, protecting cows from flies, alfalfa as a forage plant, effect of silage on milk, apple bitter rot, cold storage of cheese /prepared in the Office of Experiment Stations. Washington : U.S. Dept. of Agriculture, 1906. Cover title.~ "Compiled from the publications of the agricultural experiment stations.". 32 p. : ill. ; 23 cm. Includes bibliographical

# LEGISLATION

0016

**Pesticide regulatory decisions: production efficiency, equity, and interdependence.**

Osteen, C. Kuchler, F. New York : John Wiley. Agribusiness, an international journal. Fall 1987. v. 3 (3). p. 307-322. Includes references. (NAL Call No.: DNAL HD1401.A56).

0017

**Synthetic pheromone 10-methyl-2-tridecanone and its use in controlling the southern corn rootworm and related diabroticites.**

Guss, P.L. Tumlinson, J.H. III; Sonnet, P.E.; McLaughlin, J.R. Washington, D.C. : The Office. Abstract: A pheromonal compound produced by the southern corn rootworm has been identified as 10-methyl-2-tridecanone (10-M-2-T). The synthetic R-enantiomer of 10-M-2-T demonstrates activity toward the southern corn rootworm comparable to its natural counterpart, whereas the synthetic racemic mixture is characterized by approximately half the activity for a given amount. Related diabroticites such as the western spotted cucumber beetle also respond to the synthetic compounds. By attracting adult beetles to field traps, 10-M-2-T is a useful tool for the monitoring and control of these major agricultural pests. United States patent - United States Patent Office. Copies of USDA patents are available for a fee from the Commissioner of Patents and Trademarks, U.S. Patents and Trademarks Office, Washington, D.C. 20231.~ Includes abstract. Oct 2, 1984. (4,474,991). 1 p. Includes 5 references. (NAL Call No.: DNAL NO CALL NO. (PAT)).

# ECONOMICS

0018

## **Economic thresholds under uncertainty with application to corn nematode management.**

Moffitt, I.J. Hall, D.C.; Osteen, C.D. Experiment, Ga. : The Association. Extract: An economic threshold of agricultural pest management is derived. Results provide a method for researchers to use in making improved pest control recommendations to farmers without farm level decisionmaking. An empirical illustration for lesion nematode management in irrigated corn is given and directions for further research are indicated. Southern journal of agricultural economics - Southern Agricultural Economics Association. Includes statistical data. Dec 1984. v. 16 (2). p. 151-157. Includes 15 references. (NAL Call No.: DNAL AGE HD101.S6).

0019

## **1979 pesticide use on vegetables in five regions.**

Ferguson, W.L. Washington, D.C. : The Service. Extract: According to a 1979 Vegetable Pesticide Survey, approximately 16 million pounds of pesticides (excluding mineral spirits) were used to control weeds, insects, diseases, and nematodes on 12 vegetable crops in five regions which included 18 States. The five regions are Northeast, Southeast, Midwest, Northwest and Southwest. The 12 vegetable crops include, cabbage, cantaloups, carrots, celery, cucumbers, green peas, lettuce, onions, snap beans, sweet corn, tomatoes, and watermelons. Approximately 11.5 million acre-treatments were made ranging from a low of 137,500 treatments on 126,300 acres of cucumbers to a high of 3.2 million treatments on 555,900 acre-treatments, application rate. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Jan 1984. Available from NTIS, order no. PB84-153931. Predominantly tables ~Includes statistical data. Jan 1984. (AGES830920). 117 p. (NAL Call No.: 916762(AGE)).

# ECONOMICS OF AGRIC. PRODUCTION

0020

## **Agriculture in the South: conservation's challenge.**

JSWCA3. Healy, R.G. Sojka, R.E. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Mar/Apr 1985. v. 40 (2). p. 189-194. Includes 29 references. (NAL Call No.: DNAL 56.8 J822).

0021

## **Analyzing feed and residual disappearance of corn.**

Van Meir, L.W. Washington, D.C. : The Service. Extract: Livestock and poultry feeding is the largest market for feed grains--particularly corn. Livestock and poultry numbers in certain categories vary substantially from season to season, whereas other categories remain rather stable--not only within the year but among years as well. These seasonally variable classes of livestock and poultry on feed each quarter are weighted so that they can be aggregated into a single measure which can then be related to the quarterly feed and residual disappearance of corn and other grains. The quarterly measures of livestock and poultry, along with certain other variables, explained a significant proportion of the feed and residual disappearance of corn during the 1973-82 period. In 1983 and 1984, the regression errors have been much larger than during the estimation period. Feed outlook and situation report FDS - United States Dept. of Agriculture, Economic Research Service. Includes statistical data. May 1984. (293). p. 11-14. (NAL Call No.: DNAL 1.941 S8F32).

0022

**Applying the economic threshold concept to control lesion nematodes on corn** Craig Osteen, A.W. Johnson, Clyde C. Dowler. -. Osteen, Craig D. Washington, D.C. U.S. Dept. of Agriculture, Economic Research Service 1982. iv, 31 p. : ill. --. Bibliography: p. 29-31. (NAL Call No.: Fiche S-69 no. 1670).

0023

**Crop-hail damage in the Midwest Corn Belt.** JAMOA. Hillaker, H.J. Jr. Waite, P.J. Boston : American Meteorological Society. Journal of applied meteorology. Jan 1985. v. 24 (1). p. 3-15. maps. Includes references. (NAL Call No.: DNAL QC851.J6).

0024

**Economic effectiveness: an alternate approach to insecticide evaluation in sweet corn.** McLeod, P. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. July 1986. v. 3 (3). p. 272-279. Includes references. (NAL Call No.: DNAL

SB599.J69).

0025

**Economics of winter cover crops as a source of nitrogen for no-till corn.** JSWCA3. Frye, W.W. Smith, W.G.; Williams, R.J. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Mar/Apr 1985. v. 40 (2). p. 246-248. Includes 11 references. (NAL Call No.: DNAL 56.8 J822).

0026

**Potential effect of soil bank and corn allotment programs on income and resource use, Southern Iowa /by Arnold Paulson ... et al. .** Paulsen, Arnold A. Washington, D.C. : Agricultural Research Service, U.S. Dept. of Agriculture, 1961. In cooperation with center for Agricultural Adjustment and the Agricultural and Home Economics Experiment Station, Iowa State University. iii, 32 p. : maps ; 26 cm. Bibliography: p. 23. (NAL Call No.: DNAL A281.9 Ag8 no.48).

0027

**Projected costs and returns cotton, soybeans, corn, milo and wheat-- Red River and central areas-- Louisiana, 1986.** LAXDA. Lavergne, D.R. Paxton, K.W. Baton Rouge, La. : The Station. D.A.E. research report - Department of Agricultural Economics and Agribusiness, Louisiana State University, Louisiana Agricultural Experiment Station. Jan 1986. (644). 50 p. (NAL Call No.: DNAL 100 L935).

0028

**Projected costs and returns cotton, soybeans, rice, corn, milo and wheat, northeast Louisiana, 1986.** LAXDA. Paxton, K.W. Lavergne, D.R.; Zacharias, T.; McManus, B. Baton Rouge, La. : The Station. D.A.E. research report - Department of Agricultural Economics and Agribusiness, Louisiana State University, Louisiana Agricultural Experiment Station. Includes statistical data. Jan 1986. (645). 93 p. maps. (NAL Call No.: DNAL 100 L935).

0029

**The relative risk efficiencies of alternative tillage practices for irrigated corn production.** Tew, B.V. Rafsnider, G. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers.

Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-2531). 19 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

0030

**The risk and return with deficit irrigation.**  
Martin, D. Van Brocklin, J. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-2594). 28 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

# FARM ORGANIZATION AND MANAGEMENT

0031

**Adjusting central Indiana farming to corn borer conditions / George W. Collier, Lynn Robertson .**

Collier, George W., 1897-. Robertson, Lynn, 1890-. Lafayette, Ind. : Purdue University Agricultural Experiment Station, 1934. Cover title. - Produced with the cooperation of the Bureau of Agricultural Economics, USDA, Washington, D.C. 36 p. : ill., 1 map ; 24 cm. (NAL Call No.: DNAL 100 In2P no.389).

0032

**Bioeconomic modeling to simulate weed control strategies for continuous corn (Zea mays).**

WEESA6. King, R.P. Lybecker, D.W.; Schweizer, E.E.; Zimdahl, R.L. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1986. v. 34 (6). p. 972-979. Includes references. (NAL Call No.: DNAL 79.8 W41).

0033

**Black cutworm and corn production in Missouri: A study of the restricted heptachlor use program.**

MAERA. Headley, J.C. English, L.M.; Ward, R.H.; Keaster, A.U. Columbia : The Station. Special report - University of Missouri - Columbia, Agricultural Experiment Station. Includes statistical data. Nov 1980. (255). 44 p. maps. (NAL Call No.: DNAL 100 M693SP).

0034

**Commercial production of sweet corn in Mississippi.**

Acock, M. Bateman, W.L.; Haygood, R.A.; Houston, D.W.; Jarratt, J.H.; Graves, B. State College, Miss. : The Service. Publication - Cooperative Extension Service, Mississippi State University. Aug 1987. (1556). 8 p. (NAL Call No.: DNAL 275.29 M68EXT).

0035

**Corn production costs.**

CRSOA. Hicks, D.R. Rehm, G.W. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Oct 1986. v. 38 (10). p. 17-19. (NAL Call No.: DNAL 6 W55).

0036

**Crop production benefits from ozone reduction: an economic analysis.**

Smith, M. Brown, D. West Lafayette : The Station. Extract: This study briefly reviews the ozone crop damage literature and reports details of the linear program modeling the authors used to obtain estimates of the shift

in cropping patterns of nine representative Indiana farms under various yield improvement alternatives. It also reports estimates of the effects on farm income both when acreages are allowed to shift between crops and when acreage is constrained to equal that which is calculated to be optimal under current yields. We should thus obtain estimates of the importance of allowing for crop substitution when calculating the economic crop gain due to reduced ozone. Station bulletin - Dept. of Agricultural Economics, Purdue University, Agricultural Experiment Station. Sept 1982. Sept 1982. (388). 42 p. Includes 65 references. (NAL Call No.: HD1775.I615).

0037

**Design and cost considerations in the sampling of northern and western corn rootworm (Coleoptera: Chrysomelidae) eggs.**

JEENAI. Hein, G.L. Tollefson, J.J.; Hinz, P.N. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1495-1499. Includes references. (NAL Call No.: DNAL 421 J822).

0038

**An economic analysis of terraces as an erosion control alternative on West Tennessee farms.**

TUAUA. Blisard, W.N. Keller, L.H. Knoxville, Tenn. : The Station. Bulletin - Tennessee, Agricultural Experiment Station. Nov 1983. (628). 44 p. Includes references. (NAL Call No.: DNAL 100 T25S (1)).

0039

**Economic realities influencing weed control programs of the eighties: new trends in research, development, registration and marketing.**

Rigglesman, J.D. Sacramento, Calif. : California Weed Conference Office. Proceedings - California Weed Conference. 1986. (38th). p. 41-48. Includes references. (NAL Call No.: DNAL 79.9 C122).

0040

**Farm practices under corn-borer conditions /by Jesse W. Tapp, George W. Collier and C.R. Arnold.**

Tapp, Jesse W. 1898-. Collier, George W. 1897-. Arnold, C. R. 1891-. Washington, D.C. : U.S. Dept. of Agriculture, 1928. 21 p. : ill., 4 maps ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1562).

0041

**A guide to till-planting for corn and soybeans in Indiana.**

Griffith, D.R. Mannering, J.V.; Mengel, D.B.; Parsons, S.D.; Bauman, T.T.; Scott, D.H.; Turpin, F.T.; Doster, D.H. West Lafayette, Ind. : The Service. Publication ID - Cooperative Extension Service, Purdue University. Jan 1982. (ID 148). 8 p. (NAL Call No.: DNAL 275.29 IN21D).

0042

**Keep cover crops and plow them, too.**

Zahradnik, F. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. Feb 1986. v. 8 (2). p. 18-21. ill. (NAL Call No.: DNAL S1.N32).

0043

**The relative risk efficiencies of alternative tillage practices for irrigated corn production.**

Tew, B.V. Rafsnider, G.T.; Lybecker, D.W.; Chapman, P.L. West Lafayette, Ind. : Purdue University. North Central journal of agricultural economics. Jan 1986. v. 8 (1). p. 83-91. Includes 29 references. (NAL Call No.: DNAL HD1773.A3N6).

0044

**Short- and long-term cost comparisons of conventional and conservation tillage systems in corn production.**

JSWCA3. Mueller, D.H. Klemme, R.M.; Daniel, T.C. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Sept/Oct 1985. v. 40 (5). p. 466-470. Includes 29 references. (NAL Call No.: DNAL 56.8 J822).

0045

**A stochastic dominance comparison of reduced tillage systems in corn and soybean production under risk.**

Klemme, R.M. Ames, Iowa : American Agricultural Economics Association. Extract: Returns per acre of reduced tillage systems including conventional, chisel, till-plant, and no-till are examined under general assumptions concerning risk. These returns are calculated using corn and soybean experimental plot yields. Stochastic dominance rankings indicate an advantage (second degree) of conventional and chisel over no-till when soil loss costs are not assigned. Annual per acre soil loss costs of \$5-15 shift rankings towards the reduced tillage systems. A \$10 per acre cost results from corn yield losses of 0.06% per year (170 bushel per acre yield base) over fifty years with a 5% real discount rate. American journal of agricultural economics. Aug

1985. v. 67 (3). p. 550-562. Includes 14 references. (NAL Call No.: DNAL 280.8 J822).

0046

**Weed control in corn.**

CRSDA. Bauman, T.T. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Mar 1986. v. 38 (6). p. 15-16. ill. (NAL Call No.: DNAL 6 W55).

0047

**What's the best moisture for corn and soybeans?.**

Hill, L. Morrison, D.; Tuite, J. Urbana, Ill. : The Department. A.E. - University of Illinois, Department of Agricultural Economics. Dec 1982. (4548). p. 15-18. (NAL Call No.: DNAL AGE 275.29 IL62P).

# DISTRIBUTION AND MARKETING

0048

**Managing drought-stressed corn and soybeans.**  
NCREB. Hesterman, O.B. Urbana-Champaign : The Service. North Central regional extension publication - Michigan State University. Cooperative Extension Service. Prices for drought-stressed maize silage based on those for alfalfa hay and maize grain. Mar 1986. (238). 8 p. ill. (NAL Call No.: DNAL S544.N6).

0049

**The shrinkage of shelled corn while in cars in transit /by J.W.T. Duvel and Laurel Duval.**  
Duvel, J. W. T. 1873-1946. Duval, Laurel. Washington, D.C. : U.S. Dept. of Agriculture, 1913. Caption title.~ "December 19, 1913.". 21 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84B no.48).

0050

**Study of corn quality during barge shipment.**  
DeHoff, T.W. Stroshine, R.; Tuite, J.; Baker, K. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3015). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

# PLANT PRODUCTION – GENERAL

0051

**Control of corn rots by seed selection /by  
James R. Holbert.**

Holbert, James R. 1890-. Urbana, Ill. :  
University of Illinois Agricultural Experiment  
Station, 1920. Cover title. 4 p. : ill. ; 23  
cm. (NAL Call No.: DNAL 275.29 IL62C no.243).

# PLANT PRODUCTION - HORTICULTURAL CROPS

0052

**Agricultural drought assessments using a crop model. --.**

Arkin, Gerald Franklin, 1942-. Dugas, William A.; Ainsworth, C. G. Temple, Tex. : Blackland Research Center ; Springfield, Va. : Available from the N.T.I.S., 1983 . Final report, cooperative agreement no. 1-07-81-VO159, Cooperative evaluation and improvement of crop growth and development models.~ "G.F. Arkin and W.A. Dugas ... were co-principal investigators and C.G. Ainsworth was the research associate"--Preface.~ Sponsoring agency: Bureau of Reclamation, Engineering and Research Center.~ "July 1983.". iv, 154 p. : ill., maps ; 28 cm. Bibliography: p. 55-59. (NAL Call No.: DNAL QC929.D8A74).

0053

**Commercial production of sweet corn in Mississippi.**

Acocck, M. Bateman, W.L.; Haygood, R.A.; Houston, D.W.; Jarratt, J.H.; Graves, B. State College, Miss. : The Service. Publication - Cooperative Extension Service, Mississippi State University. Aug 1987. (1556). 8 p. (NAL Call No.: DNAL 275.29 M68EXT).

0054

**Comparison of residual effects of hairy vetch and rye cover crops on no-till sweet corn.**

DeGregorio, R.E. Ashley, R.A. Madison : The Department. Progress report, clovers and special purpose legumes research - Univ. of Wisconsin, Dept. of Agronomy. 1986. v. 19. p. 19-21. Includes references. (NAL Call No.: DNAL SB193.P72).

0055

**Effect of deficit irrigation on yield and quality of sweet corn.**

JDSHB. Braunworth, W.S. Jr. Mack, H.J. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Jan 1987. v. 112 (1). p. 32-35. Includes 18 references. (NAL Call No.: DNAL 81 S012).

0056

**Fighting the corn borer with machinery in the two-generation area /by C.O. Reed ... et al.**

Reed, C. O. 1885-1940. Washington, D.C. : U.S. Dept. of Agriculture, 1930. Caption title.~ "Most of the information on plows and plowing beginning on page 20 is taken by permission from copyrighted bulletin 80, Plows and good plowing, by C.O. Reed and E.A. Silver, published by the Agricultural Extension Service of Ohio State University.". 50 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.132).

0057

**Response of vegetables to floating row covers and plant protectors in central Oregon.**

OASPA. Nelson, J.L. Brevig, R.; Young, M. Corvallis, Or. : The Station. Special report - Oregon State University, Agricultural Experiment Station. July 1985. (747). p. 82-86. ill. (NAL Call No.: DNAL 100 OR3M).

0058

**Yield and ear quality of sweet corn hybrids grown under virus disease conditions, 1984.**

AKARA. Dale, J.L. McFerran, J.; Wann, E.V. Fayetteville : The Station. Report series - Arkansas Agricultural Experiment Station. Oct 1984. (291). 5 p. Includes 6 references. (NAL Call No.: DNAL 100 AR42R).

0059

**Yield and ear quality of sweet corn hybrids grown under virus disease conditions, 1987.**

Dale, J.L. McFerran, J.; Wann, E.V. Fayetteville : The Station. Research series - University of Arkansas Agricultural Experiment Station. Oct 1987. (362). 3 p. (NAL Call No.: DNAL S541.5.A8R47).

# PLANT PRODUCTION - FIELD CROPS

0060

## **Adjusting corn belt farming to meet corn-borer conditions /by Kenneth H. Myers.**

Myers, Kenneth Hayes, 1898-. Washington, D.C. : U.S. Dept. of Agriculture, 1932. ii, 26 p. : ill., maps ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.1681).

0061

## **Blackbird-resistant hybrid corn reduces damage but does not increase yield.**

WLSBA. Dolbeer, R.A. Woronecki, P.P.; Stehn, R.A. Bethesda, Md. : The Society. Wildlife Society bulletin. Fall 1986. v. 14 (3). p. 298-301. Includes references. (NAL Call No.: DNAL SK357.A1W5).

0062

## **Built-in erosion control (Maize-soybean rotation, cropping systems, yields, Kentucky).**

Wells, K.L. Washington, D.C. : The Administration. Extension review - United States Department of Agriculture, Science and Education Administration. Fall 1983. v. 54 (4). p. 30-31. ill. (NAL Call No.: 1 EX892EX).

0063

## **Chemical and physical enrichments of sediment from cropland.**

Young, R.A. Olness, A.E.; Mutchler, C.K.; Moldenhauer, W.C. St. Joseph, Mich. : American Society of Agricultural Engineers, c1985. Erosion and soil productivity : proceedings of the National Symposium on Erosion and Soil Productivity, December 10-11, 1984, Hyatt Regency New Orleans, New Orleans, Louisiana. p. 107-116. Includes 17 references. (NAL Call No.: DNAL S624.A1N46 1984).

0064

## **Chemical control of Echinochloa colonum in sweet corn.**

JAUPA. Semidey, N. Almodovar, L. Mayaguez : University of Puerto Rico, Agricultural Experiment Station. The Journal of agriculture of the University of Puerto Rico. Oct 1986. v. 70 (4). p. 311-313. Includes references. (NAL Call No.: DNAL 8 P832U).

0065

## **Chemical-dust seed treatments for dent corn /by J.R. Holbert, C.S. Reddy, and Benjamin Koehler.**

Holbert, James R. 1890-. Reddy, C. S. 1887-; Koehler, Benjamin, 1890-. Washington, D.C. : U.S. Dept. of Agriculture, 1928. Caption title.~ "Contribution from the Bureau of Plant Industry.". 6 p. ; 24 cm. (NAL Call No.: DNAL 1

Ag84C no.34).

0066

## **Cold tolerance in corn hybrids as affected by tillage systems and planting dates.**

PIAIA. Funnemark, W.L. Hallauer, A.R. Cedar Falls, Iowa : The Academy. The Proceedings of the Iowa Academy of Science. Mar 1985. v. 92 (2). p. 58-62. Includes references. (NAL Call No.: DNAL 500 I093).

0067

## **Contributions of ground cover, dry matter, and nitrogen from intercrops and cover crops in a corn polyculture system.**

AGUOAT. Scott, T.W. Mt Pleasant, J.; Burt, R.F.; Otis, D.J. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1987. v. 79 (5). p. 792-798. Includes references. (NAL Call No.: DNAL 4 AM34P).

0068

## **Control of first-generation European corn borer (Lepidoptera: Pyralidae) larvae in Nebraska by applying insecticides by center-pivot irrigation systems.**

JEENAI. Witkowski, J.F. Barber, D.T.; Currier, D.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1595-1598. Includes references. (NAL Call No.: DNAL 421 J822).

0069

## **Corn and oats experiments, 1893.**

Morrow, G. E. 1840-; Gardner, F. D. 1864-; Farrington, E. H. 1860-. Champaign, Ill. : University of Illinois Agricultural Experiment Station, 1894. Caption title. p. 333-388 ; ill. ; 23 cm. (NAL Call No.: DNAL 100 I16S no.31).

0070

## **Corn and soybean yield response to crop residue management under no-tillage production systems.**

AGUOAT. Wilhelm, W.W. Doran, J.W.; Power, J.F. Madison, Wis. : American Society of Agronomy. Agronomy journal. Jan/Feb 1986. v. 78 (1). p. 184-189. Includes references. (NAL Call No.: DNAL 4 AM34P).

0071

## **Corn belt status report.**

Houston, Tex.? : Aircraft Program Operations, Science Missions and Operations Dept., Lockheed Electronics Company, 1971-. "Earth Observations Aircraft Program" -- cover.~ Each vol. has different phases and missions.~ "NASA contract

## (PLANT PRODUCTION - FIELD CROPS)

NAS 9-10950. "~ "LEC/HASD no. TWP-71-22."~ "LEC job order 67-2956-7025.". v. : ill. (some folded), maps (some folded) ; 28 cm. (NAL Call No.: DNAL S494.5.R4C62).

0072

### **Corn forage yield and chemical composition as influenced by sulfur fertilization.**

CSDSA2. Buttrey, S.A. Allen, V.G.; Fontenot, J.P.; Reneau, R.B. Jr. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. Aug 1987. v. 18 (8). p. 875-895. Includes references. (NAL Call No.: DNAL S590.C63).

0073

### **Corn kernel damage during on-farm handling.**

Pierce, R.D. Hanna, M.A. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-3018). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0074

### **Corn lodging prevention: keeping it from going down on the farm.**

CRSDA. Carter, P.R. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Mar 1985. v. 37 (6). p. 8-11. ill. (NAL Call No.: DNAL 6 W55).

0075

### **Corn phenology in relation to natural and simulated infestations of the sugarcane borer (Lepidoptera: Pyralidae).**

JEENAI. Flynn, J.L. Reagan, T.E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1984. v. 77 (6). p. 1524-1529. Includes references. (NAL Call No.: DNAL 421 J822).

0076

### **Corn production guide for 1980.**

Zublena, J.P. Clemson, S.C. : The Service. Circular - Clemson University, Cooperative Extension Service. Nov 1979. (587,rev.). p. 1-6. (NAL Call No.: DNAL 275.29 SD8E).

0077

### **Corn production handbook.**

Vanderlip, R.L. Walter, T.L.; Bark, L.D.; Hickman, J.S.; Shroyer, J.P.; Lamond, R.E.; Whitney, D.A.; Nilson, E.B.; Higgins, R.A.; Jardine, D.J. Manhattan, Kan. : The Service. C - Kansas State University, Cooperative Extension Service. Sept 1986. (560,rev.). 42 p. ill., maps. (NAL Call No.: DNAL 275.29 K13EX).

0078

### **Crop response to soil application of phosphogypsum.**

JEVQAA. Mays, D.A. Mortvedt, J.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1986. v. 15 (1). p. 78-81. Includes references. (NAL Call No.: DNAL QH540.J6).

0079

### **Crop rotations and manure versus agricultural chemicals in dryland grain production.**

JSWCA3. Sahs, W.W. Lesoing, G. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Nov/Dec 1984. v. 40 (6). p. 511-516. Includes 27 references. (NAL Call No.: DNAL 56.8 J822).

0080

### **The cultivation of corn weed control vs. moisture conservation /by D.C. Wimer and M.B. Harland.**

Wimer, D. C. 1893-. Harland, M. B. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1925. Cover title.- "This bulletin is a revision of No. 181, Soil Moisture and Tillage for Corn, issued in 1915."--P. 174 . p. 173 -196 : ill. ; 23 cm. (NAL Call No.: DNAL 100 I16S no.259).

0081

### **Damage and yield loss induced by stalk borer (Lepidoptera: Noctuidae) in field corn.**

JEENAI. Bailey, W.C. Pedigo, L.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1986. v. 79 (1). p. 233-237. Includes references. (NAL Call No.: DNAL 421 J822).

0082

### **Defoliation by the armyworm (Lepidoptera: Noctuidae) on field corn in Iowa.**

JEENAI. Mulder, P.G. Showers, W.B. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1986. v. 79 (2). p. 368-373. Includes references. (NAL Call No.: DNAL 421 J822).

0083

**Detasselling and insecticides for control of *Ostrinia funacalis* (Lepidoptera: Pyralidae) on sweet corn.**

JEENAI. Schreiner, I.H. Nafus, D.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1987. v. 80 (1). p. 263-267. Includes references. (NAL Call No.: DNAL 421 J822).

0084

**Disease development and yield losses associated with northern leaf blight on corn.**

PLDIDE. Perkins, J.M. Pedersen, W.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1987. v. 71 (10). p. 940-943. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0085

**Diseases of corn in the Midwest / prepared by M.C. Shurtleff ... et al. .**

Shurtleff, Malcolm C. Urbana, Ill. : University of Illinois, College of Agriculture, Cooperative Extension Service, 1967 . "Agricultural extension services of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin, and U.S. Department of Agriculture, cooperating." ~ "May, 1967." . 24 p. : ill. (some col.) ; 28 cm. (NAL Call No.: DNAL 275.29 I162c no.967).

0086

**Diseases of dent corn in the United States /by Arnold J. Ullstrup.**

Ullstrup, A. J. 1907-. Washington, D.C. : U.S. Dept. of Agriculture, 1943. Caption title. 34 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84C no.674).

0087

**Economic analyses of monocultured and maize-rotated soybean crops grown on southern root-knot nematode infested soil.**

Kinloch, R.A. Hewitt, T.D. S.L. : The Society. Proceedings - Soil and Crop Science Society of Florida. 1984. v. 43. p. 172-174. Includes references. (NAL Call No.: DNAL 56.9 S032).

0088

**The economics of nitrogen fertilization of corn under risk /by Richard A. Schoney. --.**

Schoney, Richard A. Madison, Wis. : College of Agricultural and Life Sciences, 1978. "April, 1978." . 11 leaves ; 29 cm. --. Bibliography: leaf 10. (NAL Call No.: DNAL

HD1401.W57 no.143).

0089

**Effect of cadmium- and zinc-treated sludge on yield and cadmium-zinc uptake of corn.**

JEVQAA. Sikora, F.J. Wolt, J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1986. v. 15 (4). p. 341-345. Includes references. (NAL Call No.: DNAL QH540.J6).

0090

**Effect of chinch bug (Heteroptera: Lygaeidae) feeding in seedling field corn.**

JEENAI. Negron, J.F. Riley, T.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1370-1372. Includes references. (NAL Call No.: DNAL 421 J822).

0091

**The effect of herbicides and mechanical weed control on maize yields (Gramoxone, Afalon, Primextra, hoeings).**

Sabin, B.A. Iqbal, M.M.; Westfall, D.G.; Ghaffar, A. Fort Collins, Colo. : Water Management Research Project, Colorado State University. Improving irrigation water management on farms : annual technical report. June 1979. June 1979. p. 137-142. (NAL Call No.: TC801.162).

0092

**Effect of physical and chemical profile modification on soybean and corn production.**

SSSU4. Hammel, J.E. Sumner, M.E.; Shahandeh, H. Madison, Wis. : The Society. Journal - Soil Science Society of America. Nov/Dec 1985. v. 49 (6). p. 1508-1511. ill. Includes references. (NAL Call No.: DNAL 56.9 S03).

0093

**The effect of row cultivation on runoff, soil loss and corn grain yield.**

McIsaac, G.F. Mitchell, J.K.; Siemens, J.C.; Hummel, J.W. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-2036). 14 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

## (PLANT PRODUCTION - FIELD CROPS)

0094

**Effect of seeding date, plant density, moisture availability and soil nitrogen fertility on maize kernel breakage susceptibility.**

CRPSAY. Bauer, P.U. Carter, P.R. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1986. v. 26 (6). p. 1220-1226. Includes references. (NAL Call No.: DNAL 64.8 C883).

0095

**Effect of tillage on residual nitrogen availability from alfalfa to succeeding corn crops.**

AGUOAT. Levin, A. Beegle, D.B.; Fox, R.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. Jan/Feb 1987. v. 79 (1). p. 34-38. Includes references. (NAL Call No.: DNAL 4 AM34P).

0096

**The effect of wheat straw mulch on weed control and corn growth /by Donald A. Crutchfield.**

Crutchfield, Donald A. 1984. Thesis (Ph. D.)--University of Nebraska, 1984. 184 leaves : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL DISS 84-28,205).

0097

**Effects of adult western corn rootworm (Coleoptera: Chrysomelidae) ear feeding on irrigated field corn in Colorado.**

JEENAI. Capinera, J.L. Epsky, N.D.; Thompson, D.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1609-1612. Includes references. (NAL Call No.: DNAL 421 J822).

0098

**The effects of corn leaf rust on maturity and quality of fresh market ears of sweet corn (Puccinia sorghi, Minnesota).**

Randle, W.M. Davis, D.W.; Groth, J.V. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Sept 1984. v. 109 (5). p. 645-648. ill. Includes 15 references. (NAL Call No.: 81 S012).

0099

**Effects of soil, soil treatment, seasonal variation, and variety on yield and composition of corn crops grown on Kentucky soil fertility plots.**

KAEBA. Weeks, M.E. Fergus, E.N. Lexington : The Station. Bulletin. - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science

Center - North, University of Kentucky, Lexington, Ky. 40546-0091. May 1946. (485). 52 p. Includes 14 references. (NAL Call No.: DNAL 100 K41 (2)).

0100

**European corn borer (Lepidoptera: Pyralidae) damage to maize in eastern North Carolina.**

JEENAI. Umeozor, O.C. Van Duyn, J.W.; Kennedy, G.G.; Bradley, J.R. Jr. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1488-1394. Includes references. (NAL Call No.: DNAL 421 J822).

0101

**European corn borer (Lepidoptera: Pyralidae): yield losses and damage in popcorn in relation to hybrid and stage of plant development.**

JEENAI. Jarvis, J.L. Ziegler, K.E.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 764-768. Includes references. (NAL Call No.: DNAL 421 J822).

0102

**Fate of nitrogen mineralized from nitrogen-15-labeled alfalfa in no-till, intercropped corn.**

Jordan, D. Harris, D.; Rice, C.W.; Tiedje, J.M. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 60. Includes references. (NAL Call No.: DNAL SB203.R6).

0103

**Field crop pests: farmers report the severity and intensity.**

XAAIA. Suguiyama, L.F. Carlson, G.A. Washington, D.C. : The Department. Abstract: The extent of pesticide use and the prevalence of pest populations on field crops vary according to the pest, crop, region, and survey year. This report estimates the importance of individual pests on selected field crops on a regional and national basis. Surveyed farmers report that the most severe and intense pests were weeds in corn and soybean production, weeds and insects in cotton, and diseases and insects in tobacco. This study relied upon farmers' ability to identify the pest infestations causing economic damage on nine selected field crops. Detailed estimates of the relative importance, severity, and time intensity of target pests are tabulated. Agriculture information bulletin - U.S. Dept. of Agriculture. Includes statistical data. Feb

## (PLANT PRODUCTION - FIELD CROPS)

1985. (487). 52 p. Includes 5 references. (NAL Call No.: DNAL 1 AG84AB).

0104

**Frost damage: how to salvage injured corn.**  
CRPSOA. Carter, P.R. Hesterman, D.B. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Aug/Sept 1987. v. 39 (9). p. 19-21. ill. (NAL Call No.: DNAL 6 W55).

0105

**Grain yield reduction caused by second generation European corn boreer in BS9 corn synthetic.**  
CRPSAY. Klenke, J.R. Russell, W.A.; Guthrie, W.D. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 859-863. Includes references. (NAL Call No.: DNAL 64.8 C883).

0106

**Hail damage to corn /by J.C. Eldredge.**  
Eldredge, John C. 1886-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanical Arts, 1936. Cover title. p. 306-322 : ill., chart ; 23 cm. (NAL Call No.: DNAL 100 Io9 no.348).

0107

**Heat and time of exposure necessary to kill larvae of the European corn borer in ear corn /by George W. Barber.**  
Barber, George W. 1890-1948. Washington, D.C. : U.S. Dept. of Agriculture, 1929. Caption title.~ "This circular is a summary of a detailed report on the investigations which is on file in the Bureau of Entomology."~ "Contribution from Bureau of Entomology.". 14 p. : ill., charts ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.71).

0108

**Herbicide applications on wheat and stubble for no-tillage corn.**  
AGJDAT. Wicks, G.A. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1986. v. 78 (5). p. 843-848. Includes references. (NAL Call No.: DNAL 4 AM34P).

0109

**Herbicide performance with different tillage systems.**  
Siemens, J.C. McGlamery, M.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Summer Meeting of

the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road,. Summer 1985. (fiche no. 85-1010). 16 p. (NAL Call No.: DNAL FICHE 290.9 AM32P).

0110

**Hybrid corn performance trials in 1983 (Yield, lodging, maize).**  
McCluskey, J.R. Scott, G.E. Mississippi State, Miss. : The Station. Bulletin - Mississippi Agricultural & Forestry Experiment Station. Dec 1983. Dec 1983. (926). 7 p. (NAL Call No.: S79.E3).

0111

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. Horner, E.S.; Johnson, J.T.; Martin, F.G.; Peacock, H.A.; White, J.M. Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Nov 1976. (77-3). 9 p. (NAL Call No.: DNAL S540.A2F62).

0112

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. (coop.). Darby, J.F. (coop.); Horner, E.S. (coop.); Lundy, H.W. (coop.); Peacock, H.A. (coop.); Martin, F.G. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Nov 1974. (75-1). 5 p. (NAL Call No.: DNAL S540.A2F62).

0113

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. (coop.). Horner, E.S. (coop.); Johnson, J.T. (coop.); Martin, F.G. (coop.); Peacock, H.A. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Oct 1979. (80-3). 8 p. (NAL Call No.: DNAL S540.A2F62).

0115

**Hybrid field corn variety tests in central, north, and west Florida.**  
Horner, E.S. (coop.). Martin, F.G. (coop.); Peacock, H.A. (coop.); Rich, J.R. (coop.); Stanley, R.L. Jr. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment

## (PLANT PRODUCTION - FIELD CROPS)

Stations, University of Florida. Includes statistical data. Nov 1983. (84-5). 8 p. (NAL Call No.: DNAL S540.A2F62).

0114

### **Hybrid field corn variety tests in central, north, and west Florida.**

Horner, E.S. (coop.); Martin, F.G. (coop.); Peacock, H.A. (coop.); Rich, J.R. (coop.); Stanley, R.L. Jr. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Oct 1980. (81-2). 9 p. (NAL Call No.: DNAL S540.A2F62).

0116

### **Hybrid field corn variety tests results from the Everglades Agricultural Area, 1981.**

Chambliss, C.G. (coop.); Shuler, K.D. (coop.); Hundley, J.L. (coop.); Horner, E.S. (coop.); Martin, F.G. (coop.); Boss, F.E. (coop.); Allen, R.J. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. 1982?. (82-6). 5 p. (NAL Call No.: DNAL S540.A2F62).

0117

### **Influence of tillage and crop rotation on soybean yields and cyst nematode population.**

Thulow, D.L. Edwards, J.H.; Gazaway, W.; Eason, J.T. Athens, Ga. : Agricultural Experiment Stations, University of Georgia. 1985?. Proceedings of the 1985 Southern Region No-Till Conference : July 16-17, 1985, Griffin, Georgia / edited by W.L. Hargrove and F.C. Boswell and G.W. Langdale. p. 45-49. Includes 4 references. (NAL Call No.: DNAL S604.S6 1985).

0118

### **Influence of tillage on development of gray leaf spot and number of airborne conidia of *Cercospora zeae-maydis*.**

PLDRA. Payne, G.A. Duncan, H.E.; Adkins, C.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1987. v. 71 (4). p. 329-332. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0119

### **Influence of weed control programs in intensive cropping systems.**

WEESA6. Glaze, N.C. Dowler, C.C.; Johnson, A.W.; Sumner, D.R. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1984. v. 32 (6). p. 762-767. Includes 10 references. (NAL Call No.: DNAL 79.8 W41).

0120

### **Keep cover crops and plow them, too.**

Zahradnik, F. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. Feb 1986. v. 8 (2). p. 18-21. ill. (NAL Call No.: DNAL S1.N32).

0121

### **Legume cover crops for no-till corn.**

Koch, P.L. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 119-120. (NAL Call No.: DNAL SB203.R6).

0122

### **Long term compaction effect on soil and plant growth.**

Schuler, R.T. Lowery, B. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-1048). 21 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

0123

### **Maize stalk borer (Lepidoptera: Pyralidae) damage and plant resistance.**

EVETEX. Ampofo, J.K.O. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1124-1129. Includes references. (NAL Call No.: DNAL QL461.E532).

0124

### **Maize yields and soil loss with conservation and conventional tillage practices on a tropical Aridisol.**

Fahrney, K.S. El-Swaify, S.A.; Lo, A.K.F.; Joy, R.J. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 138-140. Includes references. (NAL Call No.: DNAL SB203.R6).

0125

**Managing erosion potential through controlled corn residue harvest (Zea mays).**  
Colvin, T.S. Claar, P.W. II; Marley, S.J. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1981. Paper presented at the 1981 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1981. (fiche no. 81-1024). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0126

**Manure injection can sometimes injure corn crop.**  
CRSDA. Schmitt, M.A. Hoeft, R.G. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. June/July 1986. v. 38 (8). p. 19-22. ill. (NAL Call No.: DNAL 6 W55).

0127

**Manure piles and feed lots as sources of European corn borer reinfestation /by L.B. Scott.**  
Scott, L. B. 1888-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. Caption title.~ "Contribution from Bureau of Entomology.". 15 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.194).

0128

**Methods of breeding Chelonus annulipes on the Mediterranean flour moth for use against the European corn borer /by William G. Bradley.**  
Bradley, W. G. 1892-. Washington, D.C. : U.S. Dept. of Agriculture, 1941. Caption title.~ "Contribution from Bureau of Entomology and Plant Quarantine.". 23 p. : ill., 1 map ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84C no.616).

0129

**Mineral-oil treatment of sweet corn for earworm control /by George W. Barber.**  
Barber, George W. 1890-1948. Washington, D.C. : U.S. Dept. of Agriculture, 1942. Caption title.~ Supersedes the following processed publications of the U.S. Bureau of Entomology and Plant Quarantine: E-476, The use of oil for earworm control in sweet corn; E-497, The use of oil or oil containing pyrethrins for earworm control in sweet corn; and E-525, The use of oil or oil containing insecticides for earworm control in sweet corn.~ "Contribution from Bureau of Entomology and Plant Quarantine.". 16 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C

no.657).

0130

**Minespoil acidity and rowcrop productivity.**  
JEVQAA. Dancer, W.S. Jansen, I.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. July/Sept 1987. v. 16 (3). p. 242-246. Includes references. (NAL Call No.: DNAL QH540.J6).

0131

**ND257 and ND258: two new early parental lines of corn.**  
NDFRA. Cross, H.Z. Fargo, N.D. : The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Jan/Feb 1986. v. 43 (4). p. 26-29. Includes references. (NAL Call No.: DNAL 100 N813B).

0132

**Nitrogen recovery by no-till and conventional till corn from cover crops.**  
Varco, J.J. Frye, W.W.; Smith, M.S. Athens, Ga. : Agricultural Experiment Stations, University of Georgia, 1985? . Proceedings of the 1985 Southern Region No-Till Conference : July 16-17, 1985, Griffin, Georgia / edited by W.L. Hargrove and F.C. Boswell and G.W. Langdale. p. 127-131. Includes references. (NAL Call No.: DNAL S604.S6 1985).

0133

**No-tillage corn results affected by hybrids and pesticides in 1984 at the Green Acres Agronomy Farm.**  
Gallagher, R.N. Baldwin, J.A. Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. 1984? . (85-08). 8 p. (NAL Call No.: DNAL S540.A2F62).

0134

**No-tillage intercropped corn production in tall fescue sod as affected by sod-control and nitrogen fertilization.**  
AGJDAT. Wilkinson, S.R. Devine, D.J.; Belesky, D.P.; Dobson, J.W. Jr.; Dawson, R.N. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1987. v. 79 (4). p. 685-690. Includes references. (NAL Call No.: DNAL 4 AM34P).

## (PLANT PRODUCTION - FIELD CROPS)

0135

**Performance of corn hybrids exposed to corn viruses in Ohio, 1986.**

DAASA. Jordan, D.M. Louie, R.; Knoke, J.K. Wooster : Ohio Agricultural Research and Development Center. Agronomy Department series - Ohio Agricultural Research and Development Center, Department of Agronomy, Cooperative Extension Service. Jan 1987. (213). 6 p. (NAL Call No.: DNAL 100 OH32).

0136

**Pericarp injuries in seed corn prevalence in dent corn and relation to seedling blights /by Benjamin Koehler.**

Koehler, Benjamin, 1890-. Urbana, Ill. : University of Illinois, Agricultural Experiment Station, 1957. Cover title. 72 p. : ill. ; 23 cm. Bibliography: p. 70-72. (NAL Call No.: DNAL 100 I16S no.617).

0137

**Physical damage to sweet corn caused by mechanical harvesting and subsequent processing /by W.A. Huelsen and W.N. Brown.**

Huelsen, W. A. 1892-. Brown, W. N. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1952. Cover title. 45 p. : ill. ; 23 cm. Bibliography: p. 45. (NAL Call No.: DNAL 100 I16S no.561).

0138

**Plant availability of phosphorus in sewage sludge compost.**

JEVQAA. McCoy, J.L. Sikora, L.J.; Weil, R.R. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1986. v. 15 (4). p. 403-409. Includes references. (NAL Call No.: DNAL QH540.J6).

0139

**Planting crops in soybean residue.**

Lamond, R.E. Manhattan, Kan. : The Service. L - Cooperative Extension Service, Kansas State University. Feb 1984. (693). 4 p. ill. (NAL Call No.: DNAL 275.29 K13LE).

0140

**Preliminary report upon the infestation and general status of the European corn borer in western New York /by H.N. Bartley and L.B. Scott.**

Bartley, H. N. 1892-. Scott, L. B. 1888-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. Caption title.~ "Contribution from Bureau of Entomology.". 22 p. : charts ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84C no.197).

0141

**Principles of weed control for reduced-tillage corn production.**

Triplett, G.B. Jr. Champaign, Ill. : Weed Science Society of America. Monograph series of the Weed Science Society of America. 1985. (2). p. 26-40. Includes references. (NAL Call No.: DNAL SB610.M65).

0142

**Projected costs and returns cotton, soybeans, corn, milo and wheat-- Red River and central areas-- Louisiana, 1986.**

LAXDA. Lavergne, D.R. Paxton, K.W. Baton Rouge, La. : The Station. D.A.E. research report - Department of Agricultural Economics and Agribusiness, Louisiana State University, Louisiana Agricultural Experiment Station. Jan 1986. (644). 50 p. (NAL Call No.: DNAL 100 L935).

0143

**Projected costs and returns cotton, soybeans, rice, corn, milo and wheat, northeast Louisiana, 1986.**

LAXDA. Paxton, K.W. Lavergne, D.R.; Zacharias, T.; McManus, B. Baton Rouge, La. : The Station. D.A.E. research report - Department of Agricultural Economics and Agribusiness, Louisiana State University, Louisiana Agricultural Experiment Station. Includes statistical data. Jan 1986. (645). 93 p. maps. (NAL Call No.: DNAL 100 L935).

0144

**The protection of corn, 1980-November 1984 Agricola citations for diseases, insects, nematodes, chemicals, and other environmental considerations /compiled and edited by Charles N. Bebee. --.**

Bebee, Charles N. Beltsville, Md. : U.S. Dept. of Agriculture, National Agricultural Library ; Washington, D.C. : U.S. Environmental Protection Agency, Office of Pesticide Programs, 1985. "June 1985."~ Includes index. viii, 215 p. ; 28 cm. --. (NAL Call No.: DNAL az5076.A1U54 no.36).

0145

**Quantitative measurements of mefluidide protection of chilled corn plants.**

JOSHB. Tseng, M.J. Zhang, C.L.; Li, P.H. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. May 1986. v. 111 (3). p. 409-412. Includes references. (NAL Call No.: DNAL 81 S012).

0146

**Residual effect of heavy applications of animal manures on corn growth and yield and on soil properties.**

MXMRA. Evans, S.D. Goodrich, P.R.; Munter, R.C. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1985. (2,rev.). p. 58-59. (NAL Call No.: DNAL S1.M52).

0147

**Residual effect of heavy applications of animal manures on corn growth and yield and on soil properties.**

MXMRA. Evans, S.D. Goodrich, P.R.; Munter, R.C. St. Paul, Minn. : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. Includes statistical data. 1986. (2,rev.). p. 63-64. (NAL Call No.: DNAL S1.M52).

0148

**Response of no-tillage corn grown in corn and soybean residues to several nitrogen fertilizer sources.**

AGUDAT. Eckert, D.J. Dick, W.A.; Johnson, J.W. Madison, Wis. : American Society of Agronomy. Agronomy journal. Mar/Apr 1986. v. 78 (2). p. 231-235. Includes references. (NAL Call No.: DNAL 4 AM34P).

0149

**Selecting corn hybrids.**

Carter, P.R. Madison, Wis. : The Programs. Publication - Cooperative Extension Programs. University of Wisconsin - Extension. June 1984. (3265). 6 p. maps. (NAL Call No.: DNAL S544.3.W6W53).

0150

**Selection-induced differences among strains of Iowa stiff stalk synthetic maize.**

CRPSAY. Dyervides-Garcia, M. Hallauer, A.R. Madison, Wis. : Crop Science Society of America. Crop science. May/June 1986. v. 26 (3). p. 506-511. Includes references. (NAL Call No.: DNAL 64.8 C883).

0151

**Southern green stink bug, *Nezara viridula* (Heteroptera: Pentatomidae), feeding in corn.**

JEENAI. Negron, J.F. Riley, T.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1987. v. 80 (3). p. 666-669. Includes references. (NAL Call No.: DNAL 421 J822).

0152

**Studies on the prevalence of the European corn borer in the East North Central States /by A.M. Vance.**

Vance, Arlo McGrillis, 1899-. Washington, D.C. : U.S. Dept. of Agriculture, 1942. Caption title.~ "Contribution from Bureau of Entomology and Plant Quarantine.". 24 p. : maps ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84C no.649).

0153

**Technological advance, weather, and crop yield behavior.**

Offutt, S.E. Garcia, P.; Pinar, M. West Lafayette, Ind. : Purdue University. North Central journal of agricultural economics. Jan 1987. v. 9 (1). p. 49-63. Includes references. (NAL Call No.: DNAL HD1773.A3N6).

0154

**Tillage, nitrogen, herbicide, and nematicide effects on irrigated double-cropped corn and soybeans in the coastal plain /Myron B. Parker ... et al. . --.**

Parker, Myron B. Athens, Ga. : University of Georgia, College of Agriculture, Experiment Stations, 1985. "August 1985."~ Cover title.~ Map on p. 3 of cover. 35 p. : ill., 1 map ; 23 cm. Bibliography: p. 31-35. (NAL Call No.: DNAL S51.E2 no.326).

0155

**Use of farm machinery for corn-borer control in the one-generation area /by R.M. Merrill.**

Merrill, R. M. 1895-. Washington, D.C. : U.S. Dept. of Agriculture, 1934. Caption title.~ "Contribution from Bureau of Agricultural Engineering.". 11 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.321).

0156

**Value of adult corn rootworm (Coleoptera: Chrysomelidae) population estimates in pest management decision making.**

JEENAI. Foster, R.E. Tollefson, J.J.; Nyrop, J.P.; Hein, G.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1986. v. 79 (2). p. 303-310. Includes references. (NAL Call No.: DNAL 421 J822).

## (PLANT PRODUCTION - FIELD CROPS)

0157

**Weed control in growing corn /by Claude K. Shedd, Edgar V. Collins and J. Brownlee Davidson.**

Shedd, C. K. 1884-. Collins, Edgar Vermont, 1887-; Davidson, Jay Brownlee, 1880-. Ames, Iowa : Agricultural Experiment Station, Agricultural Extension Service, Iowa State College. 1942. Caption title. p. 440-467 : ill. ; 23 cm. (NAL Call No.: DNAL 100 Io9 no.P44).

0158

**Weed seed demise in soil in weed-free-corn (Zea mays) production across Nebraska.**

WEESA6. Burnside, O.C. Moomaw, R.S.; Roeth, F.W.; Wicks, G.A.; Wilson, R.G. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 248-251. Includes 19 references. (NAL Call No.: DNAL 79.8 W41).

0159

**Weed species distribution as influenced by tillage and herbicides.**

WEESA6. Wrucke, M.A. Arnold, W.E. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1985. v. 33 (6). p. 853-856. Includes 10 references. (NAL Call No.: DNAL 79.8 W41).

0160

**Wheat residue management effects on soil water storage and corn production.**

SSSJD4. Unger, P.W. Madison, Wis. : The Society. Soil Science Society of America journal. May/June 1986. v. 50 (3). p. 764-770. Includes references. (NAL Call No.: DNAL 56.9 S03).

0161

**Yield losses from second-generation European corn borers (Lepidoptera: Pyralidae) in long-season maize hybrids planted early compared with short-season hybrids planted late.**

JEENAI. Jarvis, J.L. Guthrie, W.D.; Robbins, J.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1986. v. 79 (1). p. 243-246. Includes references. (NAL Call No.: DNAL 421 J822).

0162

**Yields of corn hybrids and ratings of inbreds tested under virus disease conditions in Arkansas in 1985.**

Dale, J.L. York, J.D. Fayetteville : The Station. Research series - University of Arkansas Agricultural Experiment Station. Jan

1986. (329). 4 p. (NAL Call No.: DNAL S541.5.A8R47).

0163

**Yields of corn hybrids tested under virus disease conditions in Arkansas in 1984.**

AKAMA. Dale, J.L. York, J.D. Fayetteville, Ark. : The Station. Mimeograph series - University of Arkansas Agricultural Experiment Station. Dec 1984. (320). 2 p. (NAL Call No.: DNAL 100 AR42M).

0164

**1971 corn blight watch experiment data processing, analysis, and interpretation /by Terry L. Phillips and staff. --.**

Phillips, Terry L. West Lafayette, Ind. : Laboratory for Applications of Remote Sensing (LARS), Purdue University, 1972?. Cover title. ~ "Presented at the Fourth Annual Earth Resources Program Review, Manned Spacecraft Center (NASA), Houston, Texas, January 17, 1972.". 20 leaves : ill. ; 28 cm. --. (NAL Call No.: DNAL S494.5.R4P45).

0165

**1980 pesticide use on field corn in the Corn Belt /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, United States Department of Agriculture, 1982. "January 1982.". iii, 30 p. : ill., map ; 28 cm. --. Bibliography: p. 26. (NAL Call No.: DNAL aSB950.2.A14N5).

0166

**1980 pesticide use on field corn in the Lake States /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, United States Department of Agriculture, 1982. "January 1982.". iii, 23 p. : map ; 28 cm. --. Bibliography: p. 19. (NAL Call No.: DNAL aSB950.2.A14N52).

0167

**1980 pesticide use on field corn in the major producing states /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, U.S. Dept. of Agriculture, 1982. "February 1982.". iii, 33 p. : map ; 28 cm. --. Bibliography: p. 28. (NAL Call No.: DNAL aSB191.M2N3).

0168

222-bushel corn--without chemicals: manure, rotations and cultivation help this farmer grow record corn yields for 80 cents a bushel.

Cramer, C. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. Jan 1988. v. 10 (1). p. 12-15. ill. (NAL Call No.: DNAL S1.N32).

# PLANT BREEDING

0169

## **Aberrant ratio revisited.**

Nelson, D.E. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular and Cellular Biology of Plant Stress," April 15-21, 1984, Keystone, Colorado. 1985. v. 22. p. 1-12. Includes references. (NAL Call No.: DNAL QH506.U34).

0170

## **Adh1 and Adh2: two genes involved in the maize anaerobic response.**

Sachs, M.M. Ellis, D.J.; Finnegan, E.J.; Gerlach, W.L.; Llewellyn, D.; Peacock, W.U. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular and Cellular Biology of Plant Stress," April 15-21, 1984, Keystone, Colorado. 1985. v. 22. p. 217-226. Includes references. (NAL Call No.: DNAL QH506.U34).

0171

## **Aflatoxin contamination of corn hybrids in Alabama.**

CECHAF. Davis, N.D. Currier, C.G.; Diener, U.L. St. Paul, Minn. : American Association of Cereal Chemists. Cereal chemistry. Nov/Dec 1986. v. 63 (6). p. 467-470. Includes references. (NAL Call No.: DNAL 59.8 C33).

0172

## **Agronomic features of two maize synthetics selected for high and low stalk-crushing strength.**

CRPSAY. Berzonsky, W.A. Hawk, J.A. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 871-875. Includes references. (NAL Call No.: DNAL 64.8 C883).

0173

## **Alleles of the opaque-2 locus in maize and molecular approaches to zein regulation.**

Salamini, F. Brembilla, M.; Breckenkamp, M.; Di Fonzo, N.; Manzocchi, L.; Marotta, R.; Montanelli, C.; Motto, M.; Ponziani, G.; Soave, C. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Plant Genetics," April 13-19, 1985, Keystone, Colorado. 1985. v. 35. p. 715-721. Includes references. (NAL Call No.: DNAL QH506.U34).

0174

## **Attraction of Sitophilus Oryzae (L.) and S. zeamais Motsch. (Coleoptera: Curculionidae) to extracts from two corn genotypes.**

JKESA. Tipping, P.W. Mikolajczak, K.L.; Rodriguez, J.G.; Zilkowski, B.W.; Legg, D.E. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1986. v. 59 (1). p. 190-194. ill. Includes references. (NAL Call No.: DNAL 420 K13).

0175

## **Beat the corn borer.**

DRGAA. Evering, R. Emmaus, Pa. : Rodale Press. Organic gardening. Aug 1985. v. 32 (8). p. 55-59. ill. (NAL Call No.: DNAL 57.8 DR32).

0176

## **Biochemical response of inbred and hybrid corn (Zea mays L.) to R-25788 and its distribution with EPTC in corn seedlings.**

PCBPB. Lay, M.M. Niland, A.M. New York, N.Y. : Academic Press. Pesticide biochemistry and physiology. Feb 1985. v. 23 (1). p. 131-140. Includes 15 references. (NAL Call No.: DNAL SB951.P49).

0177

## **Blackbird-resistant hybrid corn reduces damage but does not increase yield.**

WLSBA. Dolbeer, R.A. Woronecki, P.P.; Stehn, R.A. Bethesda, Md. : The Society. Wildlife Society bulletin. Fall 1986. v. 14 (3). p. 298-301. Includes references. (NAL Call No.: DNAL SK357.A1W5).

0178

## **Breeding for and genetics of virus resistance in field corn.**

Scott, G.E. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 248-254. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0179

## **Characterization of root agravitropism induced by genetic, chemical, and developmental constraints.**

AJBDA. Moore, R. Fondren, W.M.; Marcum, H. Baltimore, Md. : Botanical Society of America. American journal of botany. Mar 1987. v. 74 (3). p. 329-336. ill. Includes references. (NAL Call No.: DNAL 450 AM36).

0180

**Chromatin organization and the control of gene activity.**  
IRCYA. Nagl, W. Orlando, Fla. : Academic Press. International review of cytology. Literature review. 1985. v. 94. p. 21-56. ill. Includes references. (NAL Call No.: DNAL 442.8 IN82).

0181

**CIMMYT's maize improvement research program.**  
Havener, R.D. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. p. 3-11. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0182

**Comparison of near-isogenic maize lines with and without the Ht1 gene for resistance to four foliar pathogens.**  
PHYTA. Leath, S. Pedersen, W.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Jan 1986. v. 76 (1). p. 108-111. Includes 23 references. (NAL Call No.: DNAL 464.8 P56).

0183

**Corn earworm: use of larval traps on corn ears as a method of evaluating corn lines for resistance.**  
JEENAI. Straub, R.W. Fairchild, M.L.; Keaster, A.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1973. v. 66 (4). p. 989-990. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0184

**Corn hybrids evaluated for lodging in 1985.**  
TFHSA. Graves, C.R. West, D.R.; Duck, B.; Thompson, R.; Freeland, R.; Bradley, J. Knoxville, Tenn. : The Station. Tennessee farm and home science - Tennessee Agricultural Experiment Station. Summer 1986. (139). p. 5-9. (NAL Call No.: DNAL 100 T25F).

0185

**Correlation between leaf-feeding resistance to European corn borer (Lepidoptera: Pyralidae) and resistance to northern corn leaf blight.**  
JEENAI. Guthrie, W.D. Barry, B.D.; Rossman, E.C.; Jarvis, J.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 811-814. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0186

**Dent corn inbreds and hybrids resistant to the corn earworm in the South / by W.A. Douglas and R.C. Eckhardt.**  
Douglas, W. A. 1906-. Eckhardt, R. C. 1913-. Washington : U.S. Dept. of Agriculture, 1957. 13 p. : ill. ; 23 cm. Literature cited: p. 13. (NAL Call No.: DNAL 1 Ag84Te no.1160).

0187

**Developing virus resistant commercial maize hybrids.**  
Eberhart, S.A. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 258-261. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0188

**Differentiation of maize genotypes for aflatoxin concentration in developing kernels.**  
CRPSAY. Widstrom, N.W. Wilson, D.M.; McMillian, W.W. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 935-937. Includes references. (NAL Call No.: DNAL 64.8 C883).

0189

**DIMBOA content at seven stages of plant development in a maize synthetic cultivar.**  
JKESA. Guthrie, W.D. Tseng, C.T.; Russell, W.A.; Coats, J.R.; Robbins, J.C.; Tollefson, J.J. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Apr 1986. v. 59 (2). p. 356-360. Includes references. (NAL Call No.: DNAL 420 K13).

0190

**Disease-free corn seed / G.N. Hoffer .**  
Hoffer, G. N. 1887-. Lafayette, Ind. : Purdue University Agricultural Experiment Station, 1920. Cover title. 12 p. : ill. ; 23 cm. (NAL Call No.: DNAL 100 In2P no.233).

0191

**Distributions for European corn borer (Lepidoptera: Pyralidae) resistance ratings of S1 lines from 'BS9' corn.**  
JEENAI. Klenke, J.R. Russell, W.A.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1986. v. 79 (4). p. 1076-1081. Includes references. (NAL Call No.: DNAL 421 J822).

## (PLANT BREEDING)

0192

**Ear resistance of maize inbreds to field aflatoxin contamination.**  
CRPSAY. Widstrom, N.W. Wilson, D.M.; McMillan, W.W. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1984. v. 24 (6). p. 1155-1157. Includes 21 references. (NAL Call No.: DNAL 64.8 C883).

0193

**Effect of husk tightness and insect (Lepidoptera) infestation on aflatoxin contamination of preharvest maize.**  
EVETEX. Barry, D. Lillehoj, E.B.; Widstrom, N.W.; McMillan, W.W.; Zuber, M.S.; Kwolek, W.F.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1116-1118. Includes references. (NAL Call No.: DNAL QL461.E532).

0194

**Effects of corn plant age and cultivar on resistance to *Cercospora zeae-maydis* and sensitivity to Cercosporin.**  
PLDRA. Gwinn, K.D. Stelzig, D.A.; Brooks, J.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. July 1987. v. 71 (7). p. 603-606. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0195

**Effects of Ht, Ht2, and/or Ht3 genes in three maize inbreds on quantitative resistance to *Exserohilum turcicum* race 2.**  
PLDRA. Leath, S. Pedersen, W.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. June 1986. v. 70 (6). p. 529-531. Includes 13 references. (NAL Call No.: DNAL 1.9 P69P).

0196

**Effects of whole corn kernels and extracts on behavior of maize weevil (Coleoptera: Curculionidae).**  
JEENAI. Tipping, P.W. Mikolajczak, K.L.; Rodriguez, J.G.; Poneleit, C.G.; Legg, D.E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1987. v. 80 (5). p. 1010-1013. Includes references. (NAL Call No.: DNAL 421 J822).

0197

**Energy consumption and food utilization of the Indian meal moth (Lepidoptera: Pyralidae) on different corn genotypes.**  
JKESA. Hockensmith, P.E. Devine, T.L.; Legg, D.E.; Rodriguez, J.G. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Oct 1986. v. 59 (4). p. 598-603. Includes references. (NAL Call No.: DNAL 420 K13).

0198

**European corn borer (Lepidoptera: Pyralidae) leaf-feeding resistance and DIMBOA content in inbred lines of dent maize grown under field versus greenhouse conditions.**  
JEENAI. Guthrie, W.D. Wilson, R.L.; Coats, J.R.; Robbins, J.C.; Tseng, C.T.; Jarvis, J.L.; Russell, W.A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1492-1496. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0199

**European corn borer (Lepidoptera: Pyralidae): yield losses and damage in popcorn in relation to hybrid and stage of plant development.**  
JEENAI. Jarvis, J.L. Ziegler, K.E.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 764-768. Includes references. (NAL Call No.: DNAL 421 J822).

0200

**European corn borer: rate of second-generation larval mortality in sorghum hybrids compared with inbred lines of maize during anthesis.**  
Guthrie, W.D. Dharmalingam, S.; Jarvis, J.L.; Kindler, D.; Atkins, R.E.; Tseng, C.T.; Zhou, D. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Literature review. July 1984. v. 1 (3). p. 273-281. ill. Includes references. (NAL Call No.: DNAL SB599.J69).

0201

**Evaluation of maize single-cross hybrids and inbred lines for resistance to 3rd-instar lack cutworm larvae (Lepidoptera: Noctuidae) (*Agrotis ipsilon*, *Zea mays*).**  
Tysen, C.T. Tollefson, J.J.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 565-568. ill. Includes references. (NAL Call No.: 421 J822).

0202

**Evaluation of physical grain quality in the BS17 and BS1(HS)C1 synthetics of maize.**  
CRPSAY. LeFord, D.R. Russell, W.A. Madison, Wis. : Crop Science Society of America. Crop science. May/June 1985. v. 25 (3). p. 471-476. Includes references. (NAL Call No.: DNAL 64.8 C883).

0203

**Evaluation of selected corn plant introductions for silk-feeding resistance to corn earworm (Lepidoptera: Noctuidae).**  
JEENAI. Wilson, R.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1987. v. 80 (5). p. 1048-1050. Includes references. (NAL Call No.: DNAL 421 J822).

0204

**Evaluation of two arthropod vectors as inoculators of developing maize ears with *Aspergillus flavus*.**  
EVETEX. Barry, D. Zuber, M.S.; Lillehoj, E.B.; McMillian, W.W.; Adams, N.U.; Kwolek, W.F.; Widstrom, N.W. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1985. v. 14 (5). p. 634-636. Includes references. (NAL Call No.: DNAL QL461.E532).

0205

**Evaluation of two procedures to select for resistance to the European corn borer in a synthetic cultivar maize DIMBOA.**  
CRPSAY. Tseng, C.T. Guthrie, W.D.; Russell, W.A.; Robbins, J.C.; Coats, J.R.; Tollefson, J.J. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1984. v. 24 (6). p. 1129-1133. Includes references. (NAL Call No.: DNAL 64.8 C883).

0206

**Expression from heterologous promoters in electroporated carrot protoplasts.**  
PLPHA. Boston, R.S. Becwar, M.R.; Ryan, R.D.; Goldsbrough, P.B.; Larkins, B.A.; Hodges, T.K. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1987. v. 83 (4). p. 742-746. ill. Includes references. (NAL Call No.: DNAL 450 P692).

0207

**Expression of lipid body protein gene during maize seed development. Spatial, temporal, and hormonal regulation.**  
JBCHA3. Vance, V.B. Huang, A.H.C. Baltimore, Md. : American Society for Biochemistry and Molecular Biology. The Journal of biological chemistry. Jan 25, 1988. v. 263 (3). p. 1476-1481. ill. Includes references. (NAL Call No.: DNAL 381 J824).

0208

**Factors contributing to resistance of exotic maize populations to maize weevil, *Sitophilus zeamais*.**  
JCECD. Serratos, A. Arnason, J.T.; Nozzolillo, C.; Lambert, J.D.H.; Philogene, B.J.R.; Fulcher, G.; Davidson, K.; Peacock, L.; Atkinson, J.; Morand, P. New York, N.Y. : Plenum Press. Journal of chemical ecology. Apr 1987. v. 13 (4). p. 751-762. ill. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0209

**Factors influencing corn (*Zea mays*) tolerance to trifluralin.**  
WEESA6. Roggenbuck, F.C. Penner, D. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1987. v. 35 (1). p. 89-94. Includes references. (NAL Call No.: DNAL 79.8 W41).

0210

**Feeding activity of *Sitophilus zeamais* (Coleoptera: Curculionidae) on resistant and susceptible corn genotypes.**  
EVETEX. Tipping, P.W. Rodriguez, J.G.; Poneleit, C.G.; Legg, D.E. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 654-658. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

0211

**Foliage consumption and development of the fall armyworm (Lepidoptera: Noctuidae) as affected by the interactions of a parasitoid, *Campoletis sonorensis* (Hymenoptera: Ichneumonidae), and resistant corn genotypes.**  
EVETEX. Isenhour, D.J. Wiseman, B.R. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1987. v. 16 (5). p. 1181-1184. Includes references. (NAL Call No.: DNAL QL461.E532).

## (PLANT BREEDING)

0212

**Gene transfer system for the phytopathogenic fungus *Ustilago maydis*.**  
PNASA. Wang, J. Holden, D.W.; Leong, S.A. Washington, D.C. : The Academy. Proceedings of the National Academy of Sciences of the United States of America. Feb 1988. v. 85 (3). p. 865-869. ill. Includes references. (NAL Call No.: DNAL 500 N21P).

0213

**Genetic analysis of *Exserohilum turcicum* lesion expansion on corn.**  
PHYTAU. Sigulas, K.M. Hill, R.R. Jr.; Ayers, J.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1988. v. 78 (2). p. 149-153. Includes references. (NAL Call No.: DNAL 464.8 P56).

0214

**Genetic control of aflatoxin production in maize.**  
PLDRA. Gardner, C.A.C. Darrah, L.L.; Zuber, M.S.; Wallin, J.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. May 1987. v. 71 (5). p. 426-429. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0215

**Genetic improvement of corn for increased productivity in Louisiana.**  
Kang, M.S. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1986? . p. 77-78. Includes references. (NAL Call No.: DNAL 100 L936).

0216

**Gibberellins (GAs) gibberellin mutants and their future in molecular biology.**  
Phinney, B.O. Spray, C.R. Columbia, Mo. : The Interdisciplinary Plant Biochemistry and Physiology Program. Current topics in plant biochemistry and physiology : Proceedings of the ... Plant Biochemistry and Physiology Symposium held at the University of Missouri, Columbia. 1985. v. 4. p. 67-74. ill. Includes 24 references. (NAL Call No.: DNAL QK861.P55).

0217

**Grain yield reduction caused by second generation European corn boreer in BS9 corn synthetic.**  
CRPSAY. Klenke, J.R. Russell, W.A.; Guthrie, W.D. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 859-863. Includes references. (NAL Call No.: DNAL 64.8 C883).

0218

**Growth characteristics of *Aspergillus flavus* on agar infused with maize kernel homogenates and aflatoxin contamination of whole kernel samples (Georgia).**  
Widstrom, N.W. McMillian, W.W.; Wilson, D.M.; Garwood, D.L.; Glover, D.V. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1984. v. 74 (8). p. 887-890. Includes 11 references. (NAL Call No.: 464.8 P56).

0219

**Hybrid corn performance trials in 1983 (Yield, lodging, maize).**  
McCluskey, J.R. Scott, G.E. Mississippi State, Miss. : The Station. Bulletin - Mississippi Agricultural & Forestry Experiment Station. Dec 1983. Dec 1983. (926). 7 p. (NAL Call No.: S79.E3).

0220

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. Horner, E.S.; Johnson, J.T.; Martin, F.G.; Peacock, H.A.; White, J.M. Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Nov 1976. (77-3). 9 p. (NAL Call No.: DNAL S540.A2F62).

0221

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. (coop.). Darby, J.F. (coop.); Horner, E.S. (coop.); Lundy, H.W. (coop.); Peacock, H.A. (coop.); Martin, F.G. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Nov 1974. (75-1). 5 p. (NAL Call No.: DNAL S540.A2F62).

0222

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. (coop.). Horner, E.S. (coop.); Johnson, J.T. (coop.); Martin, F.G. (coop.); Peacock, H.A. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Oct 1979. (80-3). 8 p. (NAL Call No.: DNAL S540.A2F62).

0224

**Hybrid field corn variety tests in central, north, and west Florida.**

Horner, E.S. (coop.). Martin, F.G. (coop.); Peacock, H.A. (coop.); Rich, J.R. (coop.); Stanley, R.L. Jr. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Oct 1980. (81-2). 9 p. (NAL Call No.: DNAL S540.A2F62).

0223

**Hybrid field corn variety tests in central, north, and west Florida.**

Horner, E.S. (coop.). Martin, F.G. (coop.); Peacock, H.A. (coop.); Rich, J.R. (coop.); Stanley, R.L. Jr. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Nov 1983. (84-5). 8 p. (NAL Call No.: DNAL S540.A2F62).

0225

**Hybrid field corn variety tests results from the Everglades Agricultural Area, 1981.**

Chambliss, C.G. (coop.). Shuler, K.D. (coop.); Hundley, J.L. (coop.); Horner, E.S. (coop.); Martin, F.G. (coop.); Boss, F.E. (coop.); Allen, R.J. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. 1982? . (82-6). 5 p. (NAL Call No.: DNAL S540.A2F62).

0226

**Identification of slow-rusting resistance to Puccinia polysora in maize inbreds and single crosses.**

PLDRA. Bailey, B.A. Schuh, W.; Frederiksen, R.A.; Bockholt, A.J.; Smith, J.D. St. Paul, Minn. : American Phytopathological Society. Plant disease. June 1987. v. 71 (6). p. 518-521. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0227

**Improvement and genetic control of partial resistance in sweet corn to corn leaf rust.**

JOSHB. Randle, W.M. Davis, D.W.; Groth, J.V. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Nov 1984. v. 109 (6). p. 777-781. Includes 24 references. (NAL Call No.: DNAL 81 S012).

0228

**Inheritance of aflatoxin B1 levels in maize kernels under modified natural inoculation with Aspergillus flavus.**

CRPSAY. Darrah, L.L. Lillehoj, E.B.; Zuber, M.S.; Scott, G.E.; Thompson, D.; West, D.R.; Widstrom, N.W.; Fortnum, B.A. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1987. v. 27 (5). p. 869-872. Includes references. (NAL Call No.: DNAL 64.8 C883).

0229

**Inheritance of resistance in Bipolaris maydis race 0 in crosses derived from nine resistant inbred lines of maize.**

PHYTA. Burnette, D.C. White, D.G. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Nov 1985. v. 75 (11). p. 1195-1200. Includes 22 references. (NAL Call No.: DNAL 464.8 P56).

0230

**Inheritance of resistance of sweet corn inbred IL677a to Puccinia sorghi Schw.**

HJHSA. Kim, S.K. Brewbaker, J.L. Alexandria, Va. : American Society for Horticultural Science. HortScience. Dec 1987. v. 22 (6). p. 1319-1320. Includes references. (NAL Call No.: DNAL SB1.H6).

0231

**Insect resistance in two recently released sweet corn inbreds, GTS1 and GTS2.**

GENSAB. Wiseman, B.R. Widstrom, N.W.; McMillian, W.W. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 16-19. Includes references. (NAL Call No.: DNAL QL461.G4).

0232

**Insect-resistant corn could increase world food.**

AGREA. Carriere, B. Washington, D.C. : The Administration. Agricultural research - U.S. Department of Agriculture, Agricultural Research Service. Feb 1985. v. 33 (2). p. 10-11. ill. (NAL Call No.: DNAL 1.98 AG84).

0233

**Introduction of a zein gene into the Ti plasmid of Agrobacterium tumefaciens.**

Goldsbrough, P.B. Karcher, S.J.; Gelvin, S.B.; Larkins, B.A. New York : Alan R. Liss. Cellular and molecular biology of plant stress. Paper presented at the "Symposium on Plant Molecular Biology," April 16-22, 1983, Keystone, Colorado. 1983. v. 12. p. 35-43. ill. Includes 14 references. (NAL Call No.: DNAL QH506.U34).

## (PLANT BREEDING)

0234

### **Investigations of plant reaction to the maize dwarf mosaic virus.**

Loeffel, F.A. Johnson, E.M. Lexington : The Station. Progress report - Kentucky Agricultural Experiment Station. Documents available from Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091.~ Includes statistical data. Feb 1966. (160). 19 p. maps. (NAL Call No.: DNAL 100 K41PR).

0235

### **Laboratory method for screening corn for European corn borer (Lepidoptera: Pyralidae) resistance.**

JEENAI. Wilson, R.L. Wissink, K.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1986. v. 79 (1). p. 274-276. Includes references. (NAL Call No.: DNAL 421 J822).

0236

### **Larval growth and behavior of the fall armyworm (Lepidoptera: Noctuidae) on callus initiated from susceptible and resistant corn hybrids.**

JEENAI. Williams, W.P. Buckley, P.M.; Davis, F.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 951-954. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0237

### **Location of the benzoxazinless (bx) locus in maize by monosomic and B-A translocational analyses.**

CRPSAY. Simcox, K.D. Weber, D.F. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1985. v. 25 (5). p. 827-830. Includes references. (NAL Call No.: DNAL 64.8 C883).

0238

### **Maize stalk borer (Lepidoptera: Pyralidae) damage and plant resistance.**

EVETEX. Ampofo, J.K.O. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1124-1129. Includes references. (NAL Call No.: DNAL QL461.E532).

0239

### **A major gene for resistance to anthracnose stalk rot in maize.**

PHYTAU. Badu-Apraku, B. Gracen, V.E.; Bergstrom, G.C. St. Paul, Minn. : American Phytopathological Society. Phytopathology. June 1987. v. 77 (6). p. 957-959. Includes

references. (NAL Call No.: DNAL 464.8 P56).

0240

### **Mechanisms of resistance in Zapalote Chico/ corn silks to fall armyworm (Lepidoptera: Noctuidae) larvae.**

JEENAI. Wiseman, B.R. Widstrom, N.W. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1986. v. 79 (5). p. 1390-1393. Includes references. (NAL Call No.: DNAL 421 J822).

0241

### **Meristematic tissues of maize plants are most susceptible to agroinfection with maize streak virus.**

Grimsley, N.H. Ramos, C.; Hein, T.; Hohn, B. New York, N.Y. : Nature Pub. Co. Bio/technology. Feb 1988. v. 6 (2). p. 185-189. ill. Includes references. (NAL Call No.: DNAL QH442.B5).

0242

### **Methodological approach to identify chemical oviposition stimulants from maize for European corn borer.**

JCECD. Stockel, J. Bar, M.; Boidron, J.N.; Bourgeois, G. New York, N.Y. : Plenum Press. Journal of chemical ecology. Mar 1987. v. 13 (3). p. 557-567. ill. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0243

### **Molecular technology for studying fungus/plant interactions.**

Yoder, O.C. Turgeon, B.G.; Garber, R.C. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1985. Plant cell/cell interactions / edited by Ian Sussex ... et al. . Paper presented at a meeting on the topic of plant cell/cell interactions at the Banbury Conference Center of Cold Spring Harbor Laboratory, New York, October 2-4, 1985. 131-135. Includes references. (NAL Call No.: DNAL QK725.P552).

0244

### **Mr R-m controlling element system in maize.**

JOHEA. Chang, M.T. Neuffer, M.G. Washington, D.C. : American Genetic Association. The Journal of heredity. May/June 1987. v. 78 (3). p. 163-170. ill. Includes references. (NAL Call No.: DNAL 442.8 AM3).

0245

**Mutagen testing with maize.**

Plewa, M.J. New York : Plenum Press, c1985.  
Basic and applied mutagenesis : with special reference to agricultural chemicals in developing countries / edit. by Amir Muhammed and R.C. von Borstel : technic. editor, Dorothy Woslyns. Paper presented at the "Symposium on Agricultural Genotoxicity in Developing Countries", October 31-November 5, 1982, Islamabad, Pakistan. p. 323-328. (NAL Call No.: DNAL RA1270.A4B37).

0246

**Mutations, the aberrant ratio phenomenon, and virus infection of maize.**

APPYA, Brakke, M.K. Palo Alto : Annual Reviews, Inc. Annual review of phytopathology. Literature review. 1984. v. 22. p. 77-94. ill. Includes 54 references. (NAL Call No.: DNAL 464.8 AN72).

0247

**ND257 and ND258: two new early parental lines of corn.**

NDFRA. Cross, H.Z. Fargo, N.D. : The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Jan/Feb 1986. v. 43 (4). p. 26-29. Includes references. (NAL Call No.: DNAL 100 N813B).

0248

**No-tillage corn results affected by hybrids and pesticides in 1984 at the Green Acres Agronomy Farm.**

Gallaher, R.N. Baldwin, J.A. Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. 1984? . (85-08). 8 p. (NAL Call No.: DNAL S540.A2F62).

0249

**Nonpreference resistance to European corn borer (Lepidoptera: Pyralidae) in the Mo-2 ECB maize cultivar.**

JKESA. Barry, D. Darrah, L.L. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1988. v. 61 (1). p. 72-75. Includes references. (NAL Call No.: DNAL 420 K13).

0250

**Pathogenic effects of *Pratylenchus scribneri* in maize inbreds and related cultivars.**

PLDRA. Waudo, S.W. Norton, D.C. St. Paul, Minn. : American Phytopathological Society. Plant disease. July 1986. v. 70 (7). p. 636-638. Includes 14 references. (NAL Call No.: DNAL 1.9

P69P).

0251

**Performance of corn hybrids exposed to corn viruses in Ohio in 1984.**

OAASA. Findley, W.R. Knoke, J.K.; Louie, R.; Underwood, J.F. Wooster, The Center. Agronomy Department series - Ohio Agricultural Research and Development Center. Feb 1985. (213). 13 p. (NAL Call No.: DNAL 100 OH32).

0252

**Performance of maize inbred line B86 in hybrid combinations: resistance to first- and second-generation European corn borers (Lepidoptera: Pyralidae).**

JEENAI. Guthrie, W.D. Russell, W.A.; Jarvis, J.L.; Robbins, J.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 93-95. Includes references. (NAL Call No.: DNAL 421 J822).

0253

**Phenotypes in corn: control of pathways alleles, time and place.**

Coe, E.H. Jr. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Plant Genetics," April 13-19, 1985, Keystone, Colorado. 1985. v. 35. p. 509-521. Includes references. (NAL Call No.: DNAL QH506.U34).

0254

**Plant genetic assays to evaluate complex environmental mixtures.**

EVSRB. Plewa, M.J. New York : Plenum Press. Environmental science research. Paper presented at the "Symposium on Short-Term Genetic Bioassays in the Evaluation of Complex Environmental Mixtures," 1984, Chapel Hill, North Carolina. 1985. v. 32. p. 45-64. ill. Includes references. (NAL Call No.: DNAL TD172.E55).

0255

**Prediction of Stewart's wilt disease in single and three-way crosses in maize.**

PLDRA. Forgey, W.M. Blanco, M.H.; Darrah, L.L.; Zuber, M.S. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1982. v. 66 (12). p. 1159-1162. Includes references. (NAL Call No.: DNAL 1.9 P69P).

## (PLANT BREEDING)

0256

**Preferred grain quantity and insect density for maize weevil (Coleoptera: Curculionidae) interaction studies.**

JEENAI. Legg, D.E. Barney, R.J.; Tipping, P.W.; Rodriguez, J.G. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1987. v. 80 (2). p. 388-393. Includes references. (NAL Call No.: DNAL 421 J822).

0257

**Purpling in maize hybrids as influenced by temperature and soil phosphorus.**

AGJ0AT. Cobbin, J. Miller, M.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1987. v. 79 (3). p. 576-582. Includes references. (NAL Call No.: DNAL 4 AM34P).

0258

**Racial diversity in maize.**

Goodman, M.M. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 29-40. maps. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0259

**Reaction of sweet corn germ plasm to common rust and an evaluation of Rp resistance in Illinois.**

PLDRA. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1987. v. 71 (9). p. 824-828. ill. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0260

**Recurrent selection for resistance to European corn borer in a corn synthetic and correlated effects on agronomic traits.**

CRPSAY. Klenke, J.R. Russell, W.A.; Guthrie, W.D. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 864-868. Includes references. (NAL Call No.: DNAL 64.8 C883).

0261

**Registration of ND257 and ND258 parental lines of maize.**

CRPSAY. Cross, H.Z. Madison, Wis. : Crop Science Society of America. Crop science. Jan/Feb 1986. v. 26 (1). p. 215. Includes 2 references. (NAL Call No.: DNAL 64.8 C883).

0262

**Relationship of harvest date and host genotype to infection of maize kernels by Fusarium moniliforme.**

PLDRA. Ochor, T.E. Trevathan, L.E.; King, S.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1987. v. 71 (4). p. 311-313. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0263

**Relationships among reactions of sweet corn hybrids to Goss' wilt, Stewart's bacterial wilt, and northern corn leaf blight.**

PLDRA. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1985. v. 69 (10). p. 845-848. Includes 23 references. (NAL Call No.: DNAL 1.9 P69P).

0264

**Resistance of dent corn inbred lines to oviposition by the maize weevil.**

JKESA. Tipping, P.W. Rodriguez, J.G.; Poneleit, C.G.; Legg, D.E. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1988. v. 61 (1). p. 131-134. Includes references. (NAL Call No.: DNAL 420 K13).

0265

**Resistance of sorghum genotypes to leaf feeding by first-generation European corn borer larvae compared with maize genotypes.**

Guthrie, W.D. Dharmalingam, S.; Jarvis, J.L.; Kindler, D.; Atkins, R.E.; Tseng, C.T.; Zhou, D. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Apr 1985. v. 2 (2). p. 175-184. Includes references. (NAL Call No.: DNAL SB599.J69).

0266

**The role of chloroplast development in nuclear gene expression.**

Taylor, W.C. Mayfield, S.P.; Martineau, B. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular Biology of Development," April 1-7, 1984, Steamboat Springs, Colorado. 1984. v. 19. p. 601-610. ill. Includes 23 references. (NAL Call No.: DNAL QH506.U34).

0267

**Segregation for resistance to aflatoxin contamination among seeds on an ear of hybrid maize.**

CRPSAY. Widstrom, N.W. McMillian, W.W.; Wilson, D.M. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1987. v. 27

(5). p. 961-963. Includes references. (NAL Call No.: DNAL 64.8 C883).

0268

**Selecting corn hybrids.**

Carter, P.R. Madison, Wis. : The Programs. Publication - Cooperative Extension Programs. University of Wisconsin - Extension. June 1984. (3265). 6 p. maps. (NAL Call No.: DNAL S544.3.W6W53).

0269

**Selection-induced differences among strains of Iowa stiff stalk synthetic maize.**

CRPSAY. Oyervides-Garcia, M. Hallauer, A.R. Madison, Wis. : Crop Science Society of America. Crop science. May/June 1986. v. 26 (3). p. 506-511. Includes references. (NAL Call No.: DNAL 64.8 C883).

0270

**Simulated acid rain effects on yield response of two corn cultivars.**

AGJOAT. Banwart, W.L. Porter, P.M.; Hassett, J.U.; Walker, W.M. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1987. v. 79 (3). p. 497-501. Includes references. (NAL Call No.: DNAL 4 AM34P).

0271

**Site of action of factors for resistance to *Fusarium moniliforme* in maize (Pericarp genotype, breeding for disease resistance).**

Scott, G.E. King, S.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1984. v. 68 (9). p. 804-806. Includes 10 references. (NAL Call No.: 1.9 P69P).

0272

**Smut expression and resistance of corn to *Sphacelotheca reiliana* in Minnesota (Head smut, hybrids, inbreds).**

Stromberg, E.L. Stienstra, W.C.; Kommedahl, T.; Matyac, C.A.; Windels, C.E.; Geadelmann, J.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1984. v. 68 (10). p. 880-884. ill. Includes 13 references. (NAL Call No.: 1.9 P69P).

0273

**Southwestern corn borer larval growth on corn callus and its relationship with leaf feeding resistance.**

CRPSAY. Williams, W.P. Davis, F.M. Madison, Wis. : Crop Science Society of America. Crop science. Mar/Apr 1985. v. 25 (2). p. 317-319. Includes 11 references. (NAL Call No.: DNAL 64.8 C883).

0274

**Structure and expression of maize hsp 70 gene.**

Shah, D.M. Rochester, D.E.; Krivi, G.G.; Hironaka, C.M.; Mozer, T.J.; Fraley, R.T.; Tiemeier, D.C. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular and Cellular Biology of Plant Stress," April 15-21, 1984, Keystone, Colorado. 1985. v. 22. p. 181-200. ill. Includes references. (NAL Call No.: DNAL QH506.U34).

0275

**Survival, growth, and development of southwestern corn borer (*Lepidoptera: Pyralidae*) on resistant and susceptible maize hybrids.**

JEENAI. Davis, F.M. Williams, W.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 847-850. Includes references. (NAL Call No.: DNAL 421 J822).

0276

**Survival, growth, and reproduction of the fall armyworm (*Lepidoptera: Noctuidae*) as affected by resistant corn genotypes.**

JEENAI. Ng, S.S. Davis, F.M.; Williams, W.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 967-971. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0277

**S1-line recurrent selection for cold tolerance in two maize populations.**

CRPSAY. Hoard, K.G. Crosbie, T.M. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1985. v. 25 (6). p. 1041-1045. Includes references. (NAL Call No.: DNAL 64.8 C883).

## (PLANT BREEDING)

0278

**The taxonomy and evolution of *Tripsacum* and *teosinte*, the closest relatives of maize.**  
Doebley, J.F. Wooster : Ohio Agricultural Research and Development Center, 1983.  
Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 15-28. ill., maps. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0279

**Type of gene action in the resistance to maize chlorotic dwarf virus in corn.**  
PHYTAJ. Rosenkranz, E. Scott, G.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1987. v. 77 (9). p. 1293-1296. Includes references. (NAL Call No.: DNAL 464.8 P56).

0280

**Uq-controlled mutable allele at the *c* locus (Maize).**  
Oberthur, E. Peterson, P.A. Columbia, Mo. : Department of Agronomy, University of Missouri. Maize genetics cooperation news letter. Apr 30, 1984. Apr 30, 1984. (58). p. 4-5. (NAL Call No.: 59.9 C813).

0281

**Use of a set of differential sorghum inbred lines to compare isolates of sugarcane mosaic virus from Sorghum and maize in nine countries.**  
PLDRA. Persley, D.M. Henzell, R.G.; Greber, R.S.; Teakle, D.S.; Toler, R.W. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1985. v. 69 (12). p. 1046-1049. Includes 26 references. (NAL Call No.: DNAL 1.9 P69P).

0282

**Use of phytotoxins in selection of disease resistant mutants in tissue culture.**  
ISJRA6. Gengenbach, B.G. Rines, H.W. Ames, Iowa : Iowa State University. Iowa state journal of research. May 1986. v. 60 (4). p. 449-476. ill. Includes references. (NAL Call No.: DNAL 470 I09).

0283

**Variable reaction within corn inbreds to maize dwarf mosaic virus not genetically controlled.**  
CRPSAY. Scott, G.E. Rosenkranz, E. Madison, Wis. : Crop Science Society of America. Crop science. Jan/Feb 1987. v. 27 (1). p. 78-79. Includes references. (NAL Call No.: DNAL 64.8 C883).

0284

**Yield and ear quality of sweet corn hybrids grown under virus disease conditions, 1983.**  
AKARA. Dale, J.L. McFerran, J.; Wann, E.V. Fayetteville : The Station. Report series - Arkansas Agricultural Experiment Station. Oct 1983. (281). 7 p. Includes 3 references. (NAL Call No.: DNAL 100 AR42R).

0285

**Yield and ear quality of sweet corn hybrids grown under virus disease conditions, 1987.**  
Dale, J.L. McFerran, J.; Wann, E.V. Fayetteville : The Station. Research series - University of Arkansas Agricultural Experiment Station. Oct 1987. (362). 3 p. (NAL Call No.: DNAL S541.5.A8R47).

0286

**Yield losses from second-generation European corn borers (*Lepidoptera: Pyralidae*) in long-season maize hybrids planted early compared with short-season hybrids planted late.**  
JEENAI. Jarvis, J.L. Guthrie, W.D.; Robbins, J.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1986. v. 79 (1). p. 243-246. Includes references. (NAL Call No.: DNAL 421 J822).

0287

**Yields of corn hybrids and ratings of inbreds tested under virus disease conditions in Arkansas in 1985.**  
Dale, J.L. York, J.O. Fayetteville : The Station. Research series - University of Arkansas Agricultural Experiment Station. Jan 1986. (329). 4 p. (NAL Call No.: DNAL S541.5.A8R47).

0288

**Yields of corn hybrids tested under virus disease conditions in Arkansas in 1984.**  
AKAMA. Dale, J.L. York, J.O. Fayetteville, Ark. : The Station. Mimeograph series - University of Arkansas Agricultural Experiment Station. Dec 1984. (320). 2 p. (NAL Call No.: DNAL 100 AR42M).

0289

**1983 virus tolerance ratings of maize genotypes grown in Missouri.**  
Wallin, J.R. Dannah, L.L. Beltsville, Md. : The Service. ARS - United States Department of Agriculture, Agricultural Research Service. Sept 1985. (34). 8 p. (NAL Call No.: DNAL aS21.R44A7).

# PLANT ECOLOGY

0290

Temperature and precipitation in relation to the number of generations of European corn borer in the United States /by K.D. Arbuthnot. Arbuthnot, K. D. 1902-. Washington : U.S. Dept. of Agriculture, 1949. Caption title. 22 p. : ill., maps ; 23 cm. Literature cited: p. 21-22. (NAL Call No.: DNAL 1 Ag84Te no.987).

# PLANT STRUCTURE

0291

**Agronomic features of two maize synthetics selected for high and low stalk-crushing strength.**

CRPSAY. Benzonsky, W.A. Hawk, J.A. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 871-875. Includes references. (NAL Call No.: DNAL 64.8 C883).

0292

**Chemical and in vitro digestible dry matter composition of maize stalks after selection for stalk strength and stalk-rot resistance.**

CRPSAY. Albrecht, K.A. Martin, M.J.; Russell, W.A.; Wedin, W.F.; Buxton, D.R. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 1051-1055. Includes references. (NAL Call No.: DNAL 64.8 C883).

0293

**Effects of 2,4-D amine on root morphology and minerals of Zea seedlings.**

PYTLA. Kord, M.A.A. Corvallis, Or. : Harold N. and Alma L. Moldenke. Phytologia. Mar 1987. v. 62 (2). p. 91-99. Includes references. (NAL Call No.: DNAL 450 P563).

# PLANT NUTRITION

0294

**Corn forage yield and chemical composition as influenced by sulfur fertilization.**

CSOSA2. Buttrey, S.A. Allen, V.G.; Fontenot, J.P.; Reneau, R.B. Jr. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. Aug 1987. v. 18 (8). p. 875-895. Includes references. (NAL Call No.: DNAL S590.C63).

0295

**Corn growth and yield response to ethylene dibromide and nitrogen.**

AGJOAT. Touchton, J.T. Rodriguez-Kabana, R. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1985. v. 77 (3). p. 389-392. Includes 22 references. (NAL Call No.: DNAL 4 AM34P).

0296

**Division S-3-soil microbiology and biochemistry.**

SSSJD4. Caly, D.E. Molina, J.A.E.; Clapp, C.E.; Linden, D.R. Madison, Wis. : The Society. Journal - Soil Science Society of America. Mar/Apr 1985. v. 49 (2). p. 322-325. ill. Includes references. (NAL Call No.: DNAL 56.9 S03).

0297

**Evaluation of an acid phosphatase assay for detection of phosphorus deficiency in leaves of maize (Zea mays L.).**

JPNUDS. Elliott, G.C. Lauchli, A. New York, N.Y. : Marcel Dekker. Journal of plant nutrition. 1986. v. 9 (11). p. 1469-1477. Includes references. (NAL Call No.: DNAL QK867.J67).

0298

**Inhibitory effect of pseudobactin on the uptake of iron by higher plants.**

APMBA. Becker, J.O. Hedges, R.W.; Messens, E. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. May 1985. v. 49 (5). p. 1090-1093. ill. Includes 25 references. (NAL Call No.: DNAL 448.3 AP5).

0299

**Legume nitrogen transformation and recovery by corn as influenced by tillage.**

Varco, J.U. Frye, W.W.; Smith, M.S.; Grove, J.H. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in

Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 40. Includes references. (NAL Call No.: DNAL SB203.R6).

0300

**Nitrogen availability to corn in soils previously amended with organic wastes.**

CSOSA2. Ruby, T.P. Griffin, G.F. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. June 1985. v. 16 (6). p. 569-581. Includes 17 references. (NAL Call No.: DNAL S590.C63).

0301

**Nitrogen utilization from fertilizer and legume residues in legume-corn rotations.**

AGJOAT. Hesterman, D.B. Russelle, M.P.; Sheaffer, C.C.; Heichel, G.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1987. v. 79 (4). p. 726-731. Includes references. (NAL Call No.: DNAL 4 AM34P).

0302

**Phosphorus efficiency and phosphate-iron interaction in maize.**

AGJOAT. Elliott, G.C. Lauchli, A. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1985. v. 77 (3). p. 399-403. Includes references. (NAL Call No.: DNAL 4 AM34P).

0303

**Relationships among anaerobically mineralized nitrogen chemical indexes, and nitrogen availability to corn (Determination of soil fertility, Zea mays).**

Fox, R.H. Piekielek, W.P. Madison, Wis. : The Society. Journal - Soil Science Society of America. Sept/Oct 1984. v. 48 (5). p. 1087-1090. ill. Includes 19 references. (NAL Call No.: 56.9 S03).

0304

**Response of no-tillage corn grown in corn and soybean residues to several nitrogen fertilizer sources.**

AGJOAT. Eckert, D.J. Dick, W.A.; Johnson, J.W. Madison, Wis. : American Society of Agronomy. Agronomy journal. Mar/Apr 1986. v. 78 (2). p. 231-235. Includes references. (NAL Call No.: DNAL 4 AM34P).

## **(PLANT NUTRITION)**

**0305**

**Seedling growth and nutrition status in early sweet corn in relation to phosphorus and zinc under controlled low temperatures (Fertilizer rates, deficiency symptoms).**

Swiader, J.M. Gerber, J.M. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. July 1984. v. 109 (4). p. 535-539. Includes 24 references. (NAL Call No.: 81 S012).

**0306**

**A simple method for production of Glomus aggregatum inoculum using controlled-release fertilizer.**

HJHSA. Coltman, R.R. Waterer, D.R.; Huang, R.S. Alexandria, Va. : American Society for Horticultural Science. HortScience. Feb 1988. v. 23 (1). p. 213-215. Includes references. (NAL Call No.: DNAL SB1.H6).

**0307**

**Solubility characteristics of residual phosphate in a fertilized and limed Ultisol.**

SSSJD4. Harrison, R.B. Adams, F. Madison, Wis. : The Society. Soil Science Society of America journal. July/Aug 1987. v. 51 (4). p. 963-969. Includes references. (NAL Call No.: DNAL 56.9 S03).

**0308**

**Uptake of nitrogen from soil, fertilizer, and crop residues by no-till corn and soybean.**

SSSJD4. Power, J.F. Doran, J.W.; Wilhelm, W.W. Madison, Wis. : The Society. Journal - Soil Science Society of America. Jan/Feb 1986. v. 50 (1). p. 137-142. Includes references. (NAL Call No.: DNAL 56.9 S03).

# PLANT PHYSIOLOGY AND BIOCHEMISTRY

0309

**Ability of fungal isolates from maize and sorghum to infect roots and reduce seedling emergence of two maize hybrids.**

PLDRA. Chambers, K.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Aug 1987. v. 71 (8). p. 736-739. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0310

**Adh1 and Adh2: two genes involved in the maize anaerobic response.**

Sachs, M.M. Ellis, D.J.; Finnegan, E.J.; Gerlach, W.L.; Llewellyn, D.; Peacock, W.U. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular and Cellular Biology of Plant Stress," April 15-21, 1984, Keystone, Colorado. 1985. v. 22. p. 217-226. Includes references. (NAL Call No.: DNAL QH506.U34).

0311

**The binding of host-selective toxin analogs to mitochondria from normal and 'Texas' male sterile cytoplasm maize.**

PLPHA. Frantzen, K.A. Daly, J.M.; Knoche, H.W. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1987. v. 83 (4). p. 863-868. Includes references. (NAL Call No.: DNAL 450 P692).

0312

**Characterization of root agravitropism induced by genetic, chemical, and developmental constraints.**

AUBOA. Moore, R. Fondren, W.M.; Marcum, H. Baltimore, Md. : Botanical Society of America. American journal of botany. Mar 1987. v. 74 (3). p. 329-336. ill. Includes references. (NAL Call No.: DNAL 450 AM36).

0313

**Characterization of the mode of action of the experimental herbicide LS 82-556**

**(S)3-N-(Methylbenzyl)carbamoyl-5-propionyl-2,6-lutidine .**

PCBPB. Matringe, M. Dufour, J.L.; Lherminier, J.; Scallia, R. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Oct 1986. v. 26 (2). p. 150-159. ill. Includes references. (NAL Call No.: DNAL SB951.P49).

0314

**Chemical and in vitro digestible dry matter composition of maize stalks after selection for stalk strength and stalk-rot resistance.**

CRPSAY. Albrecht, K.A. Martin, M.J.; Russell, W.A.; Wedin, W.F.; Buxton, D.R. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 1051-1055. Includes references. (NAL Call No.: DNAL 64.8 C883).

0315

**Chemical ionization mass spectrometry of indol-3-yl-acetic acid and cis-abscisic acid: evaluation of negative ion detection and quantification of cis-abscisic acid in growing maize roots.**

JPGRD1. Rivier, L. Saugy, M. New York, N.Y. : Springer. Journal of plant growth regulation. 1986. v. 5 (1). p. 1-16. Includes references. (NAL Call No.: DNAL QK745.J6).

0316

**Chemical modification of the bifunctional regulatory protein of maize leaf pyruvate, orthophosphate dikinase. Evidence for two distinct active sites.**

JBCHA3. Roeske, C.A. Chollet, R. Baltimore, Md. : American Society for Biochemistry and Molecular Biology. The Journal of biological chemistry. Sept 15, 1987. v. 262 (26). p. 12575-12582. Includes references. (NAL Call No.: DNAL 381 J824).

0317

**Chemical structure-activity relationships of the inhibition of sterol biosynthesis by N-substituted morpholines in higher plants.**

PCBPB. Rahier, A. Schmitt, P.; Huss, B.; Benveniste, P.; Pommer, E.H. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Feb 1986. v. 25 (1). p. 112-124. Includes references. (NAL Call No.: DNAL SB951.P49).

0318

**Chloride effects on corn.**

CSOSA2. Parker, M.B. Gaines, T.P.; Gascho, G.U. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. Dec 1985. v. 16 (12). p. 1319-1333. Includes 20 references. (NAL Call No.: DNAL S590.C63).

## (PLANT PHYSIOLOGY AND BIOCHEMISTRY)

0319

**Chloroacetanilide herbicide selectivity: analysis of glutathione and homoglutathione in tolerant, susceptible, and safened seedlings.**  
JAFCAU. Breaux, E.U. Patanella, J.E.; Sanders, E.F. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1987. v. 35 (4). p. 474-478. Includes references. (NAL Call No.: DNAL 381 J8223).

0320

**Cold tolerance in corn hybrids as affected by tillage systems and planting dates.**  
PIAIA. Funnemark, W.L. Hallauer, A.R. Cedar Falls, Iowa : The Academy. The Proceedings of the Iowa Academy of Science. Mar 1985. v. 92 (2). p. 58-62. Includes references. (NAL Call No.: DNAL 500 ID93).

0321

**Corn growth response to larval armyworm (Lepidoptera:Noctuidae) defoliation.**  
ISJRA6. Mulder, P.G. Showers, W.B. Ames, Iowa : Iowa State University Press. Iowa state journal of research. Nov 1987. v. 62 (2). p. 279-292. Includes references. (NAL Call No.: DNAL 470 ID9).

0322

**Crop response to soil application of phosphogypsum.**  
JEVQAA. Mays, D.A. Mortvedt, J.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1986. v. 15 (1). p. 78-81. Includes references. (NAL Call No.: DNAL QH540.J6).

0323

**Damage to corn caused by Euschistus servus, Euschistus variolarius, and Acrosternum hilare (Heteroptera: Pentatomidae) under greenhouse conditions.**  
JEENAI. Townsend, L.H. Sedlacek, J.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1986. v. 79 (5). p. 1254-1258. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0324

**Decline in phytotoxicity of benzyl isothiocyanate formulated as granules.**  
WEESA6. Dale, J.E. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 325-327. Includes 8 references. (NAL Call No.: DNAL 79.8 W41).

0325

**Differentiation of maize genotypes for aflatoxin concentration in developing kernels.**  
CRPSAY. Widstrom, N.W. Wilson, D.M.; McMillian, W.W. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 935-937. Includes references. (NAL Call No.: DNAL 64.8 C883).

0326

**DIMBOA content at seven stages of plant development in a maize synthetic cultivar.**  
JKESA. Guthrie, W.D. Tseng, C.T.; Russell, W.A.; Coats, J.R.; Robbins, J.C.; Tollefson, J.J. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Apr 1986. v. 59 (2). p. 356-360. Includes references. (NAL Call No.: DNAL 420 K13).

0327

**Dissipation of the membrane potential in susceptible corn mitochondria by the toxin of Helminthosporium maydis, race T, and toxin analogs.**  
PLPHA. Holden, M.J. Sze, H. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. July 1987. v. 84 (3). p. 670-676. Includes references. (NAL Call No.: DNAL 450 P692).

0328

**Effect of difenopenten-ethyl on isolated corn (Zea mays L.) and soybean (Glycine max L.) mitochondrial membrane integrity and physiological activities.**  
PCBPB. Gealy, D.R. Boydston, R.A.; Klein, R.R.; Koepe, D.E. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Jan 1987. v. 27 (1). p. 106-113. Includes references. (NAL Call No.: DNAL SB951.P49).

0329

**The effect of DPX-F6025 on plant growth, pigment synthesis, and biomass synthesis.**  
PNWSB. Devlin, R.M. Koszanski, Z.K. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1986. v. 40. p. 115-119. Includes references. (NAL Call No.: DNAL 79.9 N814).

0330

**Effect of humic acid on aluminum toxicity in corn plants.**  
SDSCAK. Tan, K.H. Binger, A. Baltimore, Md. : Williams & Wilkins. Soil science. Jan 1986. v. 141 (1). p. 20-25. ill. Includes references. (NAL Call No.: DNAL 56.8 S03).

0331

Effect of perfluidone on metabolism of lipids in maize (*Zea mays* L.) and sunflower (*Helianthus annuus* L.).

JPGRDI. Valadon, L.R.G. Kates, M. New York, N.Y. : Springer. Journal of plant growth regulation. 1984. v. 3 (2). p. 111-120. Includes 11 references. (NAL Call No.: DNAL QK745.J6).

0332

Effects of haloxyfop on corn (*Zea mays*) and soybean (*Glycine max*) cell suspension cultures.

WEESA6. Cho, H.Y. Widholm, J.M.; Slife, F.W. Champaign, Ill. : Weed Science Society of America. Weed science. July 1986. v. 34 (4). p. 496-501. Includes 15 references. (NAL Call No.: DNAL 79.8 W41).

0333

Effects of methomyl and *Helminthosporium maydis* toxin on matrix volume, proton motive force, and NAD accumulation in maize (*Zea mays* L.) mitochondria.

PLPHA. Berville, A. Ghazi, A.; Charbonnier, M.; Bonavent, J.F. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Oct 1984. v. 76 (2). p. 508-517. Includes 36 references. (NAL Call No.: DNAL 450 P692).

0334

Effects of moisture content, temperature, and test variables on results with grain breakage testers (Corn, *Zea mays*, handling damage).

Herum, F.L. Blaisdell, J.L. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1981. Paper presented at the 1981 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1981. (fiche no. 81-3030). 1 microfiche : 111. Includes references. (NAL Call No.: FICHE S-72).

0335

Effects of sublethal concentrations of bentazon, fluazifop, haloxyfop, and sethoxydim on corn (*Zea mays*).

WEESA6. Chernicky, J.P. Slife, F.W. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 171-174. Includes 14 references. (NAL Call No.: DNAL 79.8 W41).

0336

Effects of tillage with controlled wheel traffic on soil properties and root growth of corn.

JSWCA3. Bauder, J.W. Randall, G.W.; Schuler, R.T. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. July/Aug 1985. v. 40 (4). p. 382-385. Includes 14 references. (NAL Call No.: DNAL 56.8 J822).

0337

Effects of whole corn kernels and extracts on behavior of maize weevil (Coleoptera: Curculionidae).

JEENAI. Tipping, P.W. Mikolajczak, K.L.; Rodriguez, J.G.; Poneleit, C.G.; Legg, D.E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1987. v. 80 (5). p. 1010-1013. Includes references. (NAL Call No.: DNAL 421 J822).

0338

Effects of 2,4-D amine on root morphology and minerals of *Zea* seedlings.

PYTLA. Kord, M.A.A. Corvallis, Or. : Harold N. and Alma L. Moldenke. Phytologia. Mar 1987. v. 62 (2). p. 91-99. Includes references. (NAL Call No.: DNAL 450 P563).

0339

European corn borer (Lepidoptera: Pyralidae) leaf-feeding resistance and DIMBOA content in inbred lines of dent maize grown under field versus greenhouse conditions.

JEENAI. Guthrie, W.D. Wilson, R.L.; Coats, J.R.; Robbins, J.C.; Tseng, C.T.; Jarvis, J.L.; Russell, W.A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1492-1496. Includes references. (NAL Call No.: DNAL 421 J822).

0340

Evaluation of nitrogen availability indexes for a sludge compost amended soil.

JEVQAA. O'Keefe, B.E. Axley, J.; Meisinger, J.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1986. v. 15 (2). p. 121-128. Includes references. (NAL Call No.: DNAL QH540.J6).

## (PLANT PHYSIOLOGY AND BIOCHEMISTRY)

0341

**Expression from heterologous promoters in electroporated carrot protoplasts.**  
PLPHA. Boston, R.S. Becwar, M.R.; Ryan, R.D.; Goldsbrough, P.B.; Larkins, B.A.; Hodges, T.K. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1987. v. 83 (4). p. 742-746. ill. Includes references. (NAL Call No.: DNAL 450 P692).

0342

**Expression of lipid body protein gene during maize seed development. Spatial, temporal, and hormonal regulation.**  
JBCHA3. Vance, V.B. Huang, A.H.C. Baltimore, Md. : American Society for Biochemistry and Molecular Biology. The Journal of biological chemistry. Jan 25, 1988. v. 263 (3). p. 1476-1481. ill. Includes references. (NAL Call No.: DNAL 381 J824).

0343

**Factors contributing to resistance of exotic maize populations to maize weevil, Sitophilus zeamais.**  
JCECD. Serratos, A. Arnason, J.T.; Nozzolillo, C.; Lambert, J.D.H.; Philogene, B.J.R.; Fulcher, G.; Davidson, K.; Peacock, L.; Atkinson, J.; Morand, P. New York, N.Y. : Plenum Press. Journal of chemical ecology. Apr 1987. v. 13 (4). p. 751-762. ill. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0344

**GC-MS identification of GA20-13-O-glucoside formed from GA20 in normal plants and dwarf-1 mutants of Zea mays L.**  
JPGRI. Schneider, G. Schmidt, J.; Phinney, B.D. New York, N.Y. : Springer. Journal of plant growth regulation. 1987. v. 5 (4). p. 217-223. ill. Includes references. (NAL Call No.: DNAL QK745.J6).

0345

**Gibberellin structure-dependent interaction between gibberellins and deoxygibberellin C in the growth of dwarf maize seedlings.**  
PLPHA. Hashimoto, T. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1987. v. 83 (4). p. 910-914. Includes references. (NAL Call No.: DNAL 450 P692).

0346

**Gibberellins (GAs) gibberellin mutants and their future in molecular biology.**  
Phinney, B.D. Spray, C.R. Columbia, Mo. : The Interdisciplinary Plant Biochemistry and Physiology Program. Current topics in plant biochemistry and physiology : Proceedings of the ... Plant Biochemistry and Physiology Symposium held at the University of Missouri, Columbia. 1985. v. 4. p. 67-74. ill. Includes 24 references. (NAL Call No.: DNAL QK861.P55).

0347

**Hydrolytic activation versus oxidative degradation of aspart herbicide, and imidazolinone aryl-carboxylate, in susceptible wild oat versus tolerant corn and wheat.**  
PCBPB. Brown, M.A. Chiu, T.Y.; Miller, P. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Jan 1987. v. 27 (1). p. 24-29. Includes references. (NAL Call No.: DNAL SB951.P49).

0348

**Imidazolinones and acetohydroxyacid synthase from higher plants: Properties of the enzyme from maize suspension culture cells and evidence for the binding of imazapyr to acetohydroxyacid synthase in vivo.**  
PLPHA. Muhitch, M.J. Shaner, D.L.; Stidham, M.A. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Feb 1987. v. 83 (2). p. 451-456. Includes references. (NAL Call No.: DNAL 450 P692).

0349

**In vivo <sup>31</sup>P NMR studies of corn root tissue and its uptake of toxic metals.**  
PLPHA. Pfeffer, P.E. Tu, S.I.; Gerasimowicz, W.V.; Cavanaugh, J.R. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Jan 1985. v. 80 (1). p. 77-84. Includes 37 references. (NAL Call No.: DNAL 450 P692).

0350

**The influence of plant injury and the root rot diseases upon the physical and chemical composition of corn grain /by George H. Dungan.**  
Dungan, George Harlan, 1887-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1926. Cover title. p. 253-281 : ill. ; 23 cm. Bibliography: p. 280-281. (NAL Call No.: DNAL 100 I16S no.284).

0351

**Inhibition of fatty acid biosynthesis in isolated bean and maize chloroplasts by herbicidal phenoxy-phenoxypropionic acid derivatives and structurally related compounds.**  
PCBPB. Hoppe, H.H. Zacher, H. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Dec 1985. v. 24 (3). p. 298-305. Includes references. (NAL Call No.: DNAL SB951.P49).

0352

**Inhibition of HC03- binding to photosystem II by atrazine at a low-affinity herbicide binding site.**

PLPHA. Stemler, A. Murphy, J. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Jan 1985. v. 77 (1). p. 179-182. ill. Includes 12 references. (NAL Call No.: DNAL 450 P692).

0353

**A kinetic analysis of phytochrome controlled mesocotyl growth in Zea mays seedlings.**

PLPHA. Yahalom, A. Epel, B.L.; Glinka, Z.; MacDonald, I.R.; Gordon, D.C. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. June 1987. v. 84 (2). p. 390-394. Includes references. (NAL Call No.: DNAL 450 P692).

0354

**Loss of recovery capacity of plasmalemma K<sup>+</sup> influx after cutting in chlorsulfuron pretreated maize roots.**

PLPHA. De Agazio, M. Giardina, M.C. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Dec 1984. v. 76 (4). p. 940-942. ill. Includes 16 references. (NAL Call No.: DNAL 450 P692).

0355

**Methodological approach to identify chemical oviposition stimulants from maize for European corn borer.**

JCECD. Stockel, J. Bar, M.; Boidron, J.N.; Bourgeois, G. New York, N.Y. : Plenum Press. Journal of chemical ecology. Mar 1987. v. 13 (3). p. 557-567. ill. Includes references. (NAL Call No.: DNAL QD415.A1U6).

0356

**Mode of methomyl and Bipolaris maydis (race T) toxin in uncoupling Texas male-sterile cytoplasm corn mitochondria.**

PLPHA. Klein, R.R. Koeppe, D.E. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1985. v. 77 (4). p.

912-916. Includes 27 references. (NAL Call No.: DNAL 450 P692).

0357

**Oxygen-dependent exclusion of sodium ions from shoots by roots of Zea mays (cv Pioneer 3906) in relation to salinity damage.**

PLPHA. Drew, M.C. Lauchli, A. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Sept 1985. v. 79 (1). p. 171-176. Includes 33 references. (NAL Call No.: DNAL 450 P692).

0358

**Peroxide coated seed emergence in water-saturated soil.**

AGJDAT. Langan, T.D. Pendleton, J.W.; Oplinger, E.S. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1986. v. 78 (5). p. 769-772. Includes references. (NAL Call No.: DNAL 4 AM34P).

0359

**Physiological influences of fenoxaprop on corn (Zea mays).**

PCBPB. Snipes, C.E. Street, J.E.; Luthe, D.S. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. July 1987. v. 28 (3). p. 333-340. Includes references. (NAL Call No.: DNAL SB951.P49).

0360

**Physiological responses of corn (Zea mays) to AC 243,997 in combination with valine, leucine, and isoleucine.**

PCBPB. Shaner, D.L. Reider, M.L. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Apr 1987. v. 25 (2). p. 248-257. Includes references. (NAL Call No.: DNAL SB951.P49).

0361

**A possible function for thaumatin and a TMV-induced protein suggested by homology to a maize inhibitor.**

NATUAS. Richardson, M. Valdes-Rodriguez, S.; Blanco-Labra, A. Neptune, N.J. : Macmillan Journals. Nature. June 4/10, 1987. v. 327 (6121). p. 432-434. Includes references. (NAL Call No.: DNAL 472 N21).

## (PLANT PHYSIOLOGY AND BIOCHEMISTRY)

0362

### **Quantitative measurements of mefluidide protection of chilled corn plants.**

JOSHB. Tseng, M.U. Zhang, C.L.; Li, P.H. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. May 1986. v. 111 (3). p. 409-412. Includes references. (NAL Call No.: DNAL 81 S012).

0363

### **Relationship between mefluidide treatment and abscisic acid metabolism in chilled corn leaves.**

PLPHA. Zhang, C.L. Li, P.H.; Brenner, M.L. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. June 1986. v. 81 (2). p. 699-701. Includes 17 references. (NAL Call No.: DNAL 450 P692).

0364

### **Reproduction at low silk and pollen water potentials in maize.**

CRPSAY. Westgate, M.E. Boyer, J.S. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 951-956. ill. Includes references. (NAL Call No.: DNAL 64.8 C883).

0365

### **The role of chloroplast development in nuclear gene expression.**

Taylor, W.C. Mayfield, S.P.; Martineau, B. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular Biology of Development," April 1-7, 1984, Steamboat Springs, Colorado. 1984. v. 19. p. 601-610. ill. Includes 23 references. (NAL Call No.: DNAL QH506.U34).

0366

### **Seedling emergence responses to corn seeds coated with starch containing entrapped EPTC.**

JAFCAU. Shasha, B.S. Trimnell, D.; Schreiber, M.M.; White, M.D. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1987. v. 35 (4). p. 457-461. Includes references. (NAL Call No.: DNAL 381 J8223).

0367

### **Seedling growth and nutrition status in early sweet corn in relation to phosphorus and zinc under controlled low temperatures (Fertilizer rates, deficiency symptoms).**

Swiader, J.M. Gerber, J.M. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. July 1984. v. 109

(4). p. 535-539. Includes 24 references. (NAL Call No.: 81 S012).

0368

### **Sorbic acid as a long-term protectant in stored corn.**

JEENAI. Dunkel, F.V. Read, N.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 805-812. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0369

### **Stereochemical aspects of the biosynthesis of the side chain of 9 beta, 19-cyclopropyl sterols in maize seedlings treated with tridemorph.**

PLPHA. Bladocha, M. Benveniste, P. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Dec 1985. v. 79 (4). p. 1098-1106. Includes 30 references. (NAL Call No.: DNAL 450 P692).

0370

### **Structure and expression of maize hsp 70 gene.**

Shah, D.M. Rochester, D.E.; Krivi, G.G.; Hironaka, C.M.; Mozer, T.J.; Fraley, R.T.; Tiemeier, D.C. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular and Cellular Biology of Plant Stress," April 15-21, 1984, Keystone, Colorado. 1985. v. 22. p. 181-200. ill. Includes references. (NAL Call No.: DNAL QH506.U34).

0371

### **Tridiphan**

**2-(3,5-dichlorophenyl)-2-(2,2,2-trichloroethyl)oxirane an atrazine synergist: enzymatic conversion to a potent glutathione S-transferase inhibitor.**

PCBPB. Lamoureux, G.L. Rusness, D.G. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Dec 1986. v. 26 (3). p. 323-342. Includes 40 references. (NAL Call No.: DNAL SB951.P49).

0372

### **Volatile components of corn roots: possible insect attractants.**

JAFCAU. Buttery, R.G. Ling, L.C. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1985. v. 33 (4). p. 772-774. Includes references. (NAL Call No.: DNAL 381 J8223).

# PLANT TAXONOMY AND GEOGRAPHY

0373

**The taxonomy and evolution of *Tripsacum* and teosinte, the closest relatives of maize.**

Doebley, J.F. Wooster : Ohio Agricultural Research and Development Center, 1983.

Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 15-28. ill., maps. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

# PROTECTION OF PLANTS

0374

## **Ag facts: Corn diseases.**

MUCBA. Clayton, J.L. Hart, L.P. East Lansing, Mich. : The Service. Extension bulletin E - Cooperative Extension Service, Michigan State University. June 1986. (1974). 8 p. Includes references. (NAL Call No.: DNAL 275.29 M58B).

0375

## **Beneficial bugs /Natural Food Institute.**

Dudley, Mass. : The Institute. 1986? . Cover title.~ "Where to buy natural predators that destroy aphids, cabbage worms, grasshoppers, bean beetles, gypsy moths, Japanese beetles, flies, mites, corn borers, and other pests.". 10, 1 p. ; 22 cm. (NAL Call No.: DNAL SF518.B4).

0376

## **Disease-free corn seed / G.N. Hoffer .**

Hoffer, G. N. 1887-. Lafayette, Ind. : Purdue University Agricultural Experiment Station, 1920. Cover title. 12 p. : ill. ; 23 cm. (NAL Call No.: DNAL 100 In2P no.233).

0377

## **Hybrid corn performance trials in 1983 (Yield, lodging, maize).**

McCluskey, J.R. Scott, G.E. Mississippi State, Miss. : The Station. Bulletin - Mississippi Agricultural & Forestry Experiment Station. Dec 1983. Dec 1983. (926). 7 p. (NAL Call No.: S79.E3).

0378

## **Hybrid field corn variety tests results from the Everglades Agricultural Area, 1981.**

Chambliss, C.G. (coop.). Shuler, K.D. (coop.); Hundley, J.L. (coop.); Horner, E.S. (coop.); Martin, F.G. (coop.); Boss, F.E. (coop.); Allen, R.J. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. 1982? . (82-6). 5 p. (NAL Call No.: DNAL S540.A2F62).

0379

## **Integrating techniques of vector and weed-host suppression into control programs for maize virus diseases.**

All, J.N. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 243-247. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0380

## **Major corn diseases in North Carolina.**

Duncan, H.E. Leonard, K.J.; Payne, G. Raleigh, N.C. : The Service. AG - North Carolina Agricultural Extension Service, North Carolina State University. July 1984. (343). 15 p. ill. (NAL Call No.: DNAL S544.3.N6N62).

0381

## **ND257 and ND258: two new early parental lines of corn.**

NDFRA. Cross, H.Z. Fargo, N.D. : The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Jan/Feb 1986. v. 43 (4). p. 26-29. Includes references. (NAL Call No.: DNAL 100 N813B).

0382

## **No corn borers found in Illinois in 1931.**

Urbana, Ill. : University of Illinois College of Agriculture and Agricultural Experiment Station, 1932. Cover title. 4 p. : 1 map ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.384).

0383

## **Production guidelines for growing corn, grain sorghum, and soybeans with conservation tillage in South Carolina.**

Palmer, J.H. Zublena, J.P.; Murdock, E.C.; Nolan, C.N.; Griffin, R.P.; Manley, D.; Chapin, J.W.; Smith, F.H.; Krausz, J.P.; Wolak, F.W. Clemson, S.C. : The Service. Circular - Clemson University, Cooperative Extension Service. Jan 1985. (539,rev.). 28 p. (NAL Call No.: DNAL 275.29 S08E).

0384

## **The protection of corn, 1980-November 1984 Agricola citations for diseases, insects, nematodes, chemicals, and other environmental considerations /compiled and edited by Charles N. Bebee. --.**

Bebee, Charles N. Beltsville, Md. : U.S. Dept. of Agriculture, National Agricultural Library ; Washington, D.C. : U.S. Environmental Protection Agency, Office of Pesticide Programs, 1985. "June 1985."~ Includes index. viii, 215 p. ; 28 cm. --. (NAL Call No.: DNAL aZ5076.A1U54 no.36).

0385

## **Trouble-shooter's guide to no-till corn concerns.**

Waukesha, Wis. : No-Till Farmer, Inc. No-till farmer. Feb 1987. p. 8-9. ill. (NAL Call No.: DNAL S604.N6).

0386

**Trouble shooting corn emergence problems.**  
Thomison, P.R. College Park, Md. : The Service.  
The Agronomist - Cooperative Extension Service,  
University of Maryland. July 1984. v. 21 (7).  
p. 7-8. Includes 2 references. (NAL Call No.:  
DNAL S71.A46).

0387

**1971 corn blight watch experiment data  
processing, analysis, and interpretation /by  
Terry L. Phillips and staff. --.**  
Phillips, Terry L. West Lafayette, Ind. :  
Laboratory for Applications of Remote Sensing  
(LARS), Purdue University, 1972?. Cover title.~  
"Presented at the Fourth Annual Earth Resources  
Program Review, Manned Spacecraft Center  
(NASA), Houston, Texas, January 17, 1972.". 20  
leaves : ill. ; 28 cm. --. (NAL Call No.: DNAL  
S494.5.R4P45).

# PESTS OF PLANTS - GENERAL AND MISC.

0388

**Bird damage to ripening field corn increases in the United States from 1971 to 1981 / by Jerome F. Besser and Daniel J. Brady .**

Besser, Jerome F. Brady, Daniel J. Washington, D.C. : U.S. Dept. of the Interior, Fish and Wildlife Service, 1986. Cover title. 6 p. : map ; 26 cm. Bibliography: p. 6. (NAL Call No.: DNAL SK361.F47 v.7).

0389

**Blackbird and starling feeding behavior on ripening corn ears.**

OJSCA. Bernhardt, G.E. Van Allsburg, L.; Dolbeer, R.A. Columbus, Ohio : Ohio Academy of Science. Ohio journal of science. Sept 1987. v. 87 (4). p. 125-129. Includes references. (NAL Call No.: DNAL 410 OH3).

0390

**Blackbird-resistant hybrid corn reduces damage but does not increase yield.**

WLSBA. Dolbeer, R.A. Woronecki, P.P.; Stehn, R.A. Bethesda, Md. : The Society. Wildlife Society bulletin. Fall 1986. v. 14 (3). p. 298-301. Includes references. (NAL Call No.: DNAL SK357.A1W5).

0391

**Commercial production of sweet corn in Mississippi.**

Acoc, M. Bateman, W.L.; Haygood, R.A.; Houston, D.W.; Jarratt, J.H.; Graves, B. State College, Miss. : The Service. Publication - Cooperative Extension Service, Mississippi State University. Aug 1987. (1556). 8 p. (NAL Call No.: DNAL 275.29 M68EXT).

0392

**Corn pests.**

KAEB. Garman, H. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. Dec 1909. (145,pt.2). p. 291-298. (NAL Call No.: DNAL 100 K41 (2)).

0393

**Crop damage by small mammals in no-till cornfields.**

JSWCA3. Clark, W.R. Young, R.E. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Sept/Oct 1986. v. 41 (5). p. 338-341. Includes references. (NAL Call No.: DNAL 56.8 J822).

0394

**Decline in use of avitrol to reduce blackbird damage to field corn.**

WLSBA. Kelly, S.T. Dolbeer, R.A. Bethesda, Md. : The Society. Wildlife Society bulletin. Fall 1984. v. 12 (3). p. 252-255. Includes references. (NAL Call No.: DNAL SK357.A1W5).

0395

**Factors influencing blackbird damage to field corn.**

JWMAA9. Bollinger, E.K. Caslick, J.W. Bethesda, Md. : Wildlife Society. Journal of wildlife management. Oct 1985. v. 49 (4). p. 1109-1115. Includes references. (NAL Call No.: DNAL 410 J827).

0396

**Reflecting tapes repel blackbirds from millet, sunflowers, and sweet corn.**

WLSBA. Dolbeer, R.A. Woronecki, P.P.; Bruggers, R.L. Bethesda, Md. : The Society. Wildlife Society bulletin. Winter 1986. v. 14 (4). p. 418-425. ill. Includes references. (NAL Call No.: DNAL SK357.A1W5).

0397

**Resistance of sweet corn to damage by blackbirds and starlings.**

JO5HB. Dolbeer, R.A. Woronecki, P.P.; Stehn, R.A. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Mar 1986. v. 111 (2). p. 306-311. Includes 16 references. (NAL Call No.: DNAL 81 S012).

0398

**Results of seed-treatment experiments with yellow dent corn /by James R. Holbert and Benjamin Koehler.**

Holbert, James R. 1890-. Koehler, Benjamin, 1890-. Washington : U.S. Dept. of Agriculture, 1931. Cover title. 64 p., 2 leaves of plates : ill. (some col.) ; 23 cm. Literature cited: p. 62-63. (NAL Call No.: DNAL 1 Ag84Te no.260).

0399

**Returns to corn pest management practicesMichael Hanthorn, Michael Duffy. --.**

Hanthorn, Michael. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1983. iv, 13 p. : ill. --. Bibliography: p. 13. (NAL Call No.: DNAL Fiche S-81 no.501).

0400

**Taste preferences of male red-winged blackbirds among dried samples of ten corn hybrids**

***Agelaius phoeniceus***

JWMAA9. Mason, J.R. Dolbeer, R.A.; Arzt, A.H.; Reidinger, R.F.; Woronecki, P.P. Bethesda, Md. : Wildlife Society. Journal of wildlife management. Apr 1984. v. 48 (2). p. 611-616. Includes references. (NAL Call No.: DNAL 410 J827).

0401

**Wildlife damage to corn in southern Illinois: assessment and control.**

TISAA. Westmoreland, D. Woolf, A. Springfield : The Academy. Transactions of the Illinois State Academy of Science. 1984. v. 77 (1/2). p. 3-8. (NAL Call No.: DNAL 500 IL6).

0402

**4-aminopyridine hydrochloride baits on baiting lanes protect ripening corn from blackbirds.**

WLSBA. Besser, J.F. Hanson, R.V. Bethesda, Md. : The Society. Wildlife Society bulletin. Winter 1985. v. 13 (4). p. 546-551. Includes references. (NAL Call No.: DNAL SK357.A1W5).

# PESTS OF PLANTS - INSECTS

0403

**Accelerated development of the European corn borer, *Ostrinia nubilalis* (Lepidoptera: Pyralidae), induced by interactions with *Colletotrichum graminicola* (Melanconiales: Melanconiaceae), the causal fungus of maize anthracnose.**  
AESAAI. Carruthers, R.I. Bergstrom, G.C.; Haynes, P.A. College Park, Md. : The Society. Annals of the Entomological Society of America. May 1986. v. 79 (3). p. 385-389. ill. Includes references. (NAL Call No.: DNAL 420 EN82).

0404

**Action sites best place to stop corn borers.**  
AGREA. Solomon, B. Washington, D.C. : The Administration. Agricultural research - U.S. Department of Agriculture, Agricultural Research Service. Aug 1987. v. 35 (7). p. 9. ill. (NAL Call No.: DNAL 1.98 AG84).

0405

**Activity and dispersal of adult *Melanotus depressus* and *Melanotus verberans* (Coleoptera: Elateridae) in a Missouri cornfield.**  
JKESA. Brown, E.A. Keaster, A.U. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1986. v. 59 (1). p. 127-132. Includes references. (NAL Call No.: DNAL 420 K13).

0406

**Adjusting corn belt farming to meet corn-borer conditions /by Kenneth H. Myers.**  
Myers, Kenneth Hayes, 1898-. Washington, D.C. : U.S. Dept. of Agriculture, 1932. ii, 26 p. : ill., maps ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.1681).

0407

**Adult corn rootworm (*Diabrotica*, Coleoptera: Chrysomelidae) populations in field corn in northeastern Ohio.**  
JKESA. Clement, S.L. McCartney, D.A.; Casey, M.A. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Oct 1987. v. 60 (4). p. 535-540. Includes references. (NAL Call No.: DNAL 420 K13).

0408

**Adult sampling as a means of predicting damage levels of fall armyworm (Lepidoptera: Noctuidae) in grain corn.**  
FETMA. Linduska, J.J. Harrison, F.P. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Presented at the "Fall Armyworm Symposium," 1985, Hollywood,

Florida. Sept 1986. v. 69 (3). p. 487-491. Includes references. (NAL Call No.: DNAL 420 F662).

0409

**Aerial dispersal of spiders (Araneae) in a Florida cornfield ecosystem.**  
EVETEX. Plagens, M.J. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1225-1233. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

0410

**Aflatoxin and selected biosynthetic precursors: effects on the European corn borer in the laboratory.**  
Jarvis, J.L. Guthrie, W.D.; Lillehoj, E.B. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Oct 1984. v. 1 (4). p. 354-359. Includes references. (NAL Call No.: DNAL SB599.J69).

0411

**Aflatoxin contamination of preharvest corn in Georgia: a six-year study of insect damage and visible *Aspergillus flavus*.**  
JEVQAA. McMillian, W.W. Wilson, D.M.; Widstrom, N.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1985. v. 14 (2). p. 200-202. Includes 10 references. (NAL Call No.: DNAL QH540.J6).

0412

**Air-blast sprayer--suitable for sweet corn insect control.**  
HARAA. Harper, J.D. Strother, G.R.; Marvel, M.E.; Eason, J.T. Auburn, Ala. : The Station. Highlights of agricultural research - Alabama Agricultural Experiment Station. Spring 1986. v. 33 (1). p. 8. ill. (NAL Call No.: DNAL 100 AL1H).

0413

**Aldrin susceptibility as an indicator of geographic variability in the northern corn rootworm, *Diabrotica barberi* (Coleoptera: Chrysomelidae).**  
EVETEX. Krysan, J.L. Sutter, G.R. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1986. v. 15 (2). p. 427-430. Includes references. (NAL Call No.: DNAL QL461.E532).

0414

**An alternate school of thought.**

CRSDA. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. June/July 1987. v. 39 (8). p. 25-26. (NAL Call No.: DNAL 6 W55).

0415

**Apanteles diatraeae, a braconid parasite of the southwestern corn borer /by E.G. Davis.**

Davis, E. G. 1901-. Washington : U.S. Dept. of Agriculture, 1944. Caption title. 19 p. : ill. ; 23 cm. Literature cited: p. 19. (NAL Call No.: DNAL 1 Ag84Te no.871).

0416

**Apanteles thompsoni Lyle a braconid parasite of the European corn borer /by Arlo M. Vance.**

Vance, Arlo McCrillis, 1899-. Washington : U.S. Dept. of Agriculture, 1931. Caption title. 28 p. : ill., 1 map ; 23 cm. Literature cited: p. 26-28. (NAL Call No.: DNAL 1 Ag84Te no.233).

0417

**Archytas marmoratus (Diptera: Tachinidae): screened-cage performance of mechanically extracted maggots against larval populations of Heliothis zea and Spodoptera frugiperda (Lepidoptera: Noctuidae) on whorl and early tassel-stage corn.**

JEENAI. Gross, H.R. Jr. Pair, S.D.; Layton, R.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1354-1357. Includes references. (NAL Call No.: DNAL 421 J822).

0418

**Artificial infestation of field plots.**

Sutter, G.R. Branson, T.F. New York : Springer-Verlag, c1986. Methods for the study of pest Diabrotica / edited by James L. Krysan, Thomas A. Miller, with contributions by J.F. Andersen ... et al. . In the series analytic: Springer series in experimental entomology / edited by T.A. Miller. p. 147-157. ill. Includes references. (NAL Call No.: DNAL SB945.D48M47).

0419

**Aspects of the field biology of the blackfaced leafhopper (Homoptera: Cicadellidae) in corn and pastures in Kentucky.**

JEENAI. Sedlacek, J.D. Freytag, P.H. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 605-613. Includes references. (NAL Call No.: DNAL 421 J822).

0420

**Assessment of stalk borer (Lepidoptera: Noctuidae) population dynamics by using logistic development curves and partial life tables.**

EVETEX. Lasack, P.M. Bailey, W.C.; Pedigo, L.P. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1987. v. 16 (1). p. 296-303. Includes references. (NAL Call No.: DNAL QL461.E532).

0421

**Association of corn stalk rot Fusarium spp. and western corn rootworm beetles in Colorado.**

PHYTAJ. Gilbertson, R.L. Brown, W.M. Jr.; Ruppel, E.G.; Capinera, J.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Dec 1986. v. 76 (12). p. 1309-1314. Includes 20 references. (NAL Call No.: DNAL 464.8 P56).

0422

**Banks grass mite control in corn, 1984.**

Michels, G.J. Chedester, L.D. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. July 1985. (4297). 5 p. Includes references. (NAL Call No.: DNAL 100 T31P).

0423

**Beat the corn borer.**

ORGAA. Evering, R. Emmaus, Pa. : Rodale Press. Organic gardening. Aug 1985. v. 32 (8). p. 55-59. ill. (NAL Call No.: DNAL 57.8 OR32).

0424

**Behavior and survival of Heliothis zea (Lepidoptera: Noctuidae) prepupae in no-tillage and conventional-tillage corn.**

EVETEX. Landis, D.A. Bradley, J.R. Jr.; Gould, F. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1987. v. 16 (1). p. 94-99. Includes references. (NAL Call No.: DNAL QL461.E532).

0425

**Behavioral responses of primary entomophagous predators to larval homogenates of Heliothis zea and Spodoptera frugiperda (Lepidoptera: Noctuidae) in whorl-stage corn.**

EVETEX. Gross, H.R. Jr. Pair, S.D.; Jackson, R.D. College Park, Md. : Entomological Society of America. Environmental entomology. June 1985. v. 14 (3). p. 360-364. Includes references. (NAL Call No.: DNAL QL461.E532).

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0426

A bibliography of maize weevils *Sitophilus zeamais* Metcshulsky (Coleoptera: Curculionidae) / compiled by James E. Throne. --. Throne, James E. Washington, D.C.? : U.S. Dept. of Agriculture, Agricultural Research Service, 1986. "December 1986."--cover. 32 p. ; 28 cm. --. (NAL Call No.: DNAL aS21.R44A7 no.58).

0427

Biological control of the European corn borer in the United States by W.A. Baker, W.G. Bradley, and C.A. Clark. --. Baker, W. A. (William Alfonso). Washington, D.C. U.S. Dept. of Agriculture 1949. 185 p. : ill. --. Bibliography: p. 183-185. (NAL Call No.: Fiche S-69 no.983).

0428

Biology and control of the corn leaf aphid with special reference to the southwestern states /by V.L. Wildermuth and E.V. Walter. Wildermuth, V. L. 1885-. Walter, E. V. Washington : U.S. Dept. of Agriculture, 1932. Caption title. 22 p. : ill., maps ; 24 cm. Literature cited: p. 20-21. (NAL Call No.: DNAL 1 Ag84Te no.306).

0429

Biology and host acceptance of *Microplitis manilae* (Hymenoptera: Braconidae) raised on fall armyworm larvae *Spodoptera frugiperda* (Lepidoptera: Noctuidae). FETMA. Rajapakse, R.H.S. Ashley, T.R.; Waddill, V.H. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Dec 1985. v. 68 (4). p. 653-657. Includes references. (NAL Call No.: DNAL 420 F662).

0430

The biology and morphology of the braconid *Chelonus annulipes* Wesm., a parasite of the European corn borer /by Arlo M. Vance. Vance, Arlo McGrillis, 1899-. Washington : U.S. Dept. of Agriculture, 1932. Cover title. 48 p., 1 leaf of plates : ill., 1 map ; 23 cm. Literature cited: p. 48. (NAL Call No.: DNAL 1 Ag84Te no.294).

0431

Biology and morphology of the spindle worm, or elder borer /by J.C. Silver. Silver, J. C. 1899-. Washington : U.S. Dept. of Agriculture, 1933. Caption title. 20 p. : ill. ; 23 cm. Literature cited: p. 18-19. (NAL Call No.: DNAL 1 Ag84Te no.345).

0432

Biology and phenology of the hop-vine borer, *Hydraecia immanis* Guenee, and detection of the potato stem borer, *Hydraecia micacea* (Esper) (Lepidoptera:Noctuidae), in Wisconsin. EVETEX. Giebink, B.L. Scriber, J.M.; Wedberg, J.L. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1984. v. 13 (5). p. 1216-1224. ill., maps. Includes references. (NAL Call No.: DNAL QL461.E532).

0433

Biology, ecology, and distribution of *Diabrotica*. Krysan, J.L. Branson, T.F. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 144-150. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0434

The biology of *Cremastus flavoorbitalis* (Cameron), an ichneumonid parasite of the European corn borer /by W.G. Bradley and E.D. Burgess. Bradley, W. G. 1892-. Burgess, Emory D. 1907-. Washington : U.S. Dept. of Agriculture, 1934. Caption title. 16 p., 2 p. of plates : ill. ; 23 cm. Literature cited: p. 15. (NAL Call No.: DNAL 1 Ag84Te no.441).

0435

Biology of *Peregrinus maidis* with descriptions of immature stages (Homoptera: Delphacidae). AESAAI. Tsai, J.H. Wilson, S.W. College Park, Md. : The Society. Annals of the Entomological Society of America. May 1986. v. 79 (3). p. 395-401. ill. Includes references. (NAL Call No.: DNAL 420 EN82).

0436

Biology of the seed-corn maggot in the coastal plain of the south Atlantic states /by W.J. Reid, Jr. Reid, W. J. 1902-. Washington : U.S. Dept. of Agriculture, 1940. Caption title. 44 p. : ill. ; 23 cm. Literature cited: p. 41-43. (NAL Call No.: DNAL 1 Ag84Te no.723).

0437

Biomass production of the corn earworm, *Heliothis zea* (Boddie) (Lepidoptera: Noctuidae), after repeating or switching three larva diets for four generations. EVETEX. Saad, A.D. Scott, D.R. College Park, Md. : Entomological Society of America.

Environmental entomology. Feb 1987. v. 16 (1). p. 206-210. Includes references. (NAL Call No.: DNAL QL461.E532).

0438

**Black cutworm and corn production in Missouri: A study of the restricted heptachlor use program.**

MAERA. Headley, J.C. English, L.M.; Ward, R.H.; Keaster, A.J. Columbia : The Station. Special report - University of Missouri - Columbia, Agricultural Experiment Station. Includes statistical data. Nov 1980. (255). 44 p. maps. (NAL Call No.: DNAL 100 M693SP).

0439

**The bollworm or corn earworm /F.C. Bishopp.**

Bishopp, F. C. 1884-. Washington, D.C. : U.S. Dept. of Agriculture, 1917. Cover title.~ "Contribution from the Bureau of Entomology." 16 p. : ill., 1 map ; 23 cm. Bibliography: p. 16. (NAL Call No.: DNAL 1 Ag84F no.872).

0440

**The bollworm or corn earworm /F.C. Bishopp.**

Bishopp, F. C. 1884-. Washington, D.C. : U.S. Dept. of Agriculture, 1922. "Contribution from the Bureau of Entomology."~ Originally issued Oct. 1917. 16 p. : ill., 1 map ; 23 cm. Bibliography: p. 16. (NAL Call No.: DNAL 1 Ag84F no.872 1922).

0441

**Carbofuran persistence in soil and adult corn rootworm (Coleoptera: Chrysomelidae) susceptibility: relationship to the control of damage by larvae.**

JEENAI. Felsot, A.S. Steffey, K.L.; Levine, E.; Wilson, J.G. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 45-52. Includes references. (NAL Call No.: DNAL 421 J822).

0442

**Chemical control of southwestern and European corn borer, 1986.**

Michels, G.J. Jr. Behle, R.W. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. Apr 1987. (4511). 6 p. (NAL Call No.: DNAL 100 T31P).

0443

**Chemical control of the southwestern corn borer in corn, 1984.**

Michels, G.J. Chedester, L.D. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. Apr 1985. (4295). 3 p. Includes references. (NAL Call No.: DNAL 100 T31P).

0444

**Chemigation in corn: effects of nonmulsifiable oils and sprinkler package on the efficacy of corn borer (Lepidoptera: Pyralidae) insecticides.**

JEENAI. Buschman, L.L. Lamm, F.R.; Sloderbeck, P.E.; Dick, G.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1331-1336. Includes references. (NAL Call No.: DNAL 421 J822).

0445

**Chemosterilization of European corn borer adults with diflubenzuron.**

Faragalla, A.A. Berry, E.C.; Lewis, L.C.; Guthrie, W.D. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Oct 1984. v. 1 (4). p. 371-375. Includes references. (NAL Call No.: DNAL SB599.J69).

0446

**Cold hardiness of western corn rootworm (Coleoptera:Chrysomelidae) eggs from northern and southern zones of the corn belt.**

JKESA. Gustin, R.D. Wilde, G.E. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Oct 1984. v. 57 (4). p. 722-725. maps. Includes references. (NAL Call No.: DNAL 420 K13).

0447

**Comparison of controlled infestations of Diabrotica virgifera virifera and Diabrotica barberi (Coleoptera: Chrysomelidae) on corn.**

JEENAI. Fisher, J.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1406-1408. Includes references. (NAL Call No.: DNAL 421 J822).

0448

**Comparison of day and evening crop rescue strategies to control black cutworm (Lepidoptera: Noctuidae) larvae in corn (Zea mays, Agrotis ipsilon).**

Legg, D.E. Keaster, A.J. College Park, Md. : Entomological Society of America. Journal of

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economic entomology. June 1984. v. 77 (3). p. 757-761. Includes references. (NAL Call No.: 421 J822).

0449

**Comparison of emergence of *Diabrotica virgifera virgifera* (Coleoptera:Chrysomelidae) from cut and uncut corn plants in artificial and natural infestations.**

JKESA. Fisher, J.R. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. July 1984. v. 57 (3). p. 405-408. Includes 11 references. (NAL Call No.: DNAL 420 K13).

0450

**Comparison of monoclonal antibodies and polyclonal antibodies in detection of the aster yellows mycoplasma-like organism.**

PHYTA. Lin, C.P. and Chen, T.A. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Jan 1986. v. 76 (1). p. 45-50. ill. Includes 36 references. (NAL Call No.: DNAL 464.8 P56).

0451

**Comparison of sugarline sampling and pheromone trapping for monitoring adult populations of corn earworm and fall armyworm (Lepidoptera: Noctuidae) in sweet corn.**

EVETEX. Chowdhury, M.A. Chalfant, R.B.; Young, J.R. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1987. v. 16 (6). p. 1241-1243. Includes references. (NAL Call No.: DNAL QL461.E532).

0452

**Comparison of the effect of minimum-tillage treatments on the overwintering emergence of European corn borer (Lepidoptera: Pyralidae) in cornfields.**

JEENAI. Umeozor, D.C. Van Duyn, J.W.; Bradley, J.R. Jr.; Kennedy, G.G. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 937-939. Includes references. (NAL Call No.: DNAL 421 J822).

0453

**Compatibility of intercropping with mechanized agriculture: effects of strip intercropping of pinto beans and sweet corn on insect abundance in Colorado.**

JEENAI. Capinera, J.L. Weissling, T.J.; Schweizer, E.E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1985. v. 78 (2). p. 354-357. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0454

**Concepts for combining suppression of European corn borer (Lepidoptera: pyralidae) adults and larvae in center-pivot-irrigated corn (*Ostrinia nubilalis*, Nebraska).**

Barber, D.T. Witkowski, J.F. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1984. v. 77 (4). p. 1004-1007. Includes 8 references. (NAL Call No.: 421 J822).

0455

**Conditions eliciting aerial dispersal behavior in banks grass mite, *Oligonychus pratensis* (Acari: Tetranychidae).**

EVETEX. Margolies, D.C. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1987. v. 16 (4). p. 928-932. Includes references. (NAL Call No.: DNAL QL461.E532).

0456

**Conservation tillage demonstration in southeastern Minnesota--1985.**

MXMRA. Moncrief, J.F. Wagar, T.L.; Brietbach, D.D.; D'Leary, M.J.; Breitenbach, F.R.; Dstlie, K.R. St. Paul, Minn. : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. Includes statistical data. 1986. (2,rev). p. 276-285. (NAL Call No.: DNAL S1.M52).

0457

**Conserving corn from weevils in the Gulf Coast states /E.A. Back.**

Back, E. A. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. Originally issued Feb. 1919. 30 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1029 1931).

0458

**Conserving corn from weevils in the Gulf Coast states /E.A. Back.**

Back, E. A. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 1919. Cover title.~ "Contribution from the Bureau of Entomology.". 36 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1029).

0459

**Consumption and utilization of experimentally altered corn by southern armyworm: iron, nitrogen, and cyclic hydroxamates.**

JCECD. Manuwoto, S. Scriber, J.M. New York, N.Y. : Plenum Press. Journal of chemical ecology. Nov 1985. v. 11 (11). p. 1469-1483. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0460

**Control of fall armyworm with insecticides in north Georgia sweetcorn.**

FETMA. All, J.N. Javid, A.; Guillebeau, P. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Presented at the "Fall Armyworm Symposium," 1985, Hollywood, Florida. Sept 1986. v. 69 (3). p. 598-602. Includes references. (NAL Call No.: DNAL 420 F662).

0461

**Control of first-generation European corn borer (Lepidoptera: Pyralidae) larvae in Nebraska by applying insecticides by center-pivot irrigation systems.**

JEENAI. Witkowski, J.F. Barber, D.T.; Currier, D.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1595-1598. Includes references. (NAL Call No.: DNAL 421 J822).

0462

**Control of insects on corn.**

Jones, B.F. Barnes, G. Little Rock, Ark. : The Service. Leaflet EL - Arkansas University, Cooperative Extension Service. Apr 1977. (274). 7 p. (NAL Call No.: DNAL 275.29 AR4LE).

0463

**Control of lepidopterous pests of sweet corn in the Everglades.**

Foster, R.E. s.l. : The Society. Proceedings of the ... annual meeting of the Florida State Horticulture Society. 1986. v. 98. p. 266-268. Includes references. (NAL Call No.: DNAL SB319.2.F6F56).

0464

**Control of northern corn rootworm adults on corn.**

Rodriguez, J.G. Lexington : The Station. Progress report - Kentucky Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, Lexington, Ky. 40546-0091. Jan 1956. (35). 1 p. (NAL Call No.: DNAL 100 K41PR).

0465

**Control of the corn earworm by clipping.**

KAEB. Emmert, E.M. Price, W.A. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. Nov 1942. (436). 10 p. ill. Includes 6 references. (NAL Call No.:

DNAL 100 K41 (2)).

0466

**Control soil-inhabiting insects of corn.**

Rowell, J.D. Blacksburg, Va. : The Service. Publication - Virginia Cooperative Extension Service. Jan 1970. (134,rev.). 6 p. ill. (NAL Call No.: DNAL S544.3.V8V52).

0467

**Controlling corn borers in field corn with insecticides to get both good and profitable control /by W.H. Luckmann and H.B. Petty.**

Luckmann, William Henry, 1926-. Petty, H. B. Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics : in cooperation with Illinois State Natural History Survey, 1957. Caption title. 7 p. : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.768).

0468

**Controlling corn borers in sweet corn /by W.H. Luckmann and H.B. Petty.**

Luckmann, William Henry, 1926-. Petty, H. B. Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics : in cooperation with Illinois State Natural History Survey, 1957. Cover title. 7 p. : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.773).

0469

**Controlling European corn borer (Lepidoptera: Pyralidae) on successional planted sweet corn in Western Massachusetts.**

JEENAI. Ferro, D.N. Fletcher-Howell, G. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 902-907. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0470

**Controlling root-feeding insects of corn a report of a 10-year study /J.H. Bigger and G.C. Decker.**

Bigger, J. H. 1898-. Decker, G. C. 1898-. Urbana, Ill. : University of Illinois, College of Agriculture, Agricultural Experiment Station, 1966. Cover title.~ Chiefly tables. 23, 1 p. ; 23 cm. Bibliography: p. 24. (NAL Call No.: DNAL 100 I165 no.716).

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0471

**Coordinating supplies of southwestern corn borers (Lepidoptera: Pyralidae) and fall armyworms (Lepidoptera: Noctuidae) by manipulating development time using temperature.**

JEENAI. Ng, S.S. Davis, F.M.; Williams, W.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1987. v. 80 (6). p. 1340-1344. Includes references. (NAL Call No.: DNAL 421 J822).

0472

**The corn and cotton wireworm in its relation to cereal and forage crops, with control measures /by Edmund H. Gibson.**

Gibson, Edmund H. 1891-. Washington, D.C. : U.S. Dept. of Agriculture, 1916. Caption title.~ "Contribution from the Bureau of Entomology.". 8 p. : ill. ; 23 cm. Bibliography: p. 8. (NAL Call No.: DNAL 1 Ag84F no.733).

0473

**Corn and soybean pest management practices for alternative tillage strategies.**

Hanthorn, M. Duffy, M. Washington, D.C. : The Service. Extract: Per-acre weed control costs do not vary significantly for most U.S. corn and soybean farmers using different tillage strategies. However, Midwest no-till soybean farmers incur significantly higher weed control costs than other Midwest soybean farmers because they apply more herbicides. In general, conservation-till corn and soybean farmers substitute broad spectrum herbicide applications for mechanical cultivation to control weeds. Per-acre insecticide use and costs are not significantly different among tillage strategies for soybean farmers. No-till corn farmers, however, apply significantly more insecticides than other corn farmers. Per-acre returns are not significantly different among tillage strategies for corn and soybean farmers, except in the Midwest where conventional-till soybean farmers harvest a significantly higher yield than no-till soybean farmers. Inputs outlook and situation report - U.S. Department of Agriculture, Economic Research Service. Oct 1984. (2). p. 14-17. (NAL Call No.: DNAL aSB950.2.A1I4).

0474

**The corn bill-bugs in Illinois /by S.A. Forbes.** Forbes, Stephen Alfred, 1844-1930. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1902. Caption title. p. 435-461 ; 23 cm. Bibliography: p. 457-461. (NAL Call No.: DNAL 100 I16S no.79).

0475

**Corn-borer control a three-point program /by W.P. Flint ... et al. .**

Flint, W. P. 1882-. Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1942. Cover title. 12 p. : ill., map, plans ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.521).

0476

**Corn borer control in field corn /prepared jointly by the Illinois State Natural History Survey and the Departments of Agronomy and Agricultural Engineering of the Illinois Agricultural Experiment Station.**

Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1949. Cover title. 16 p. : ill., charts ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.637).

0477

**Corn borer control in sweet corn /by G.C. Decker and J.W. Apple.**

Decker, G. C. 1898-. Apple, J. W. Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1949. Cover title.~ In cooperation with Illinois State Natural History Survey. 16 p. : ill., charts ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.646).

0478

**Corn-borer numbers increase 1944 situation and recommendations /prepared jointly by the Illinois State Natural History Survey and the Departments of Agronomy and Agricultural Engineering of the Illinois Agricultural Experiment Station.**

Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1944. Cover title.~ This circular is a revision of Circular 555.~ "In cooperation with Illinois State Natural History Survey.". 12 p. : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.576).

0479

**Corn-borer situation 1943 /prepared jointly by the Illinois State Natural History Survey and the Department of Agronomy and Agricultural Engineering of Illinois Agricultural Experiment Station.**

Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1943. Cover title.~ In cooperation with Illinois Natural History Survey.~ This circular is a revision of circular 521. 12 p. : ill., map ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.555).

0480

**The corn earworm its ravages on field corn and suggestions for control /W.J. Phillips and Kenneth M. King.**

Phillips, W. J. 1879-. King, Kenneth M. 1896-. Washington, D.C. : U.S. Dept. of Agriculture, 1923. Cover title. 18 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1310).

0481

**Corn earworm and fall armyworm occurrence and control on sweet corn ears in south Florida.**

JEENAI. Janes, M.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1973. v. 66 (4). p. 973-974. Includes references. (NAL Call No.: DNAL 421 J822).

0482

**The corn earworm as an enemy of field corn in the eastern states /by R.A. Blanchard and W.A. Douglas.**

Blanchard, R. A. 1900-. Douglas, W. A. 1906-. Washington, D.C. : U.S. Dept. of Agriculture, 1953. 15 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1651 1953).

0483

**The corn earworm as an enemy of field corn in the eastern states by R.A. Blanchard and W.A. Douglas . --.**

Blanchard, R. A. Washington, D.C. : U.S. Dept. of Agriculture, 1953. 15 p. : ill. --. (NAL Call No.: DNAL Fiche S-70 no.1651 1953).

0484

**Corn earworm control.**

York, A.C. Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. Dec 1977. (31). 2 p. ill. (NAL Call No.: DNAL SB844.I6P8).

0485

**Corn earworm dynamics and suppression on green beans in northwest Arkansas.**

McLeod, P. Fayetteville, Ark. : Arkansas State Horticultural Society. Proceedings of the ... annual meeting - Arkansas State Horticultural Society. 1984. (105th). p. 34-38. ill. (NAL Call No.: DNAL SB21.A7A7).

0486

**Corn earworm (Lepidoptera: Noctuidae): comparison of field survival of larvae from normal and irradiated parents.**

JEENAI. Carpenter, J.E. Young, J.R.; Cromroy, H.L.; Sparks, A.N. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1987. v. 80 (4). p. 883-886. Includes references. (NAL Call No.: DNAL 421 J822).

0487

**Corn earworm (Lepidoptera: Noctuidae): effects of substerilizing doses of radiation and inherited sterility on reproduction.**

JEENAI. Carpenter, J.E. Young, J.R.; Sparks, A.N.; Cromroy, H.L.; Chowdhury, M.A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1987. v. 80 (2). p. 483-489. Includes references. (NAL Call No.: DNAL 421 J822).

0488

**Corn earworm (Lepidoptera: Noctuidae) in southwest Idaho: prediction of intensity of infestation.**

EVELEX. Scott, D.R. College Park, Md. : Entomological Society of America. Environmental entomology. June 1987. v. 16 (3). p. 821-824. Includes references. (NAL Call No.: DNAL QL461.E532).

0489

**Corn earworm (Lepidoptera: Noctuidae): influence of irradiation and mating history on the mating propensity of females.**

JEENAI. Carpenter, J.E. Sparks, A.N.; Cromroy, H.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1987. v. 80 (6). p. 1233-1237. Includes references. (NAL Call No.: DNAL 421 J822).

0490

**Corn earworm on sweet corn: emergence and yield of plants grown from undamaged seed from damaged and undamaged ears (Lepidoptera: Noctuidae).**

JEENAI. Scott, D.R. White, S.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1985. v. 78 (3). p. 700-703. Includes references. (NAL Call No.: DNAL 421 J822).

## (PESTS OF PLANTS - INSECTS)

0491

**Corn earworm: use of larval traps on corn ears as a method of evaluating corn lines for resistance.**

JEENAI. Straub, R.W. Fairchild, M.L.; Keaster, A.U. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1973. v. 66 (4). p. 989-990. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0492

**The corn earworm ravages on field corn and suggestions for control / W.J. Phillips and Kenneth M. King . --.**

Phillips, W. J. Washington, D.C. : U.S. Dept. of Agriculture, 1923. 18 p. : ill. --. (NAL Call No.: DNAL Fiche S-70 no.1310).

0493

**Corn growth response to larval armyworm (Lepidoptera:Noctuidae) defoliation.**

ISJRA6. Mulder, P.G. Showers, W.B. Ames, Iowa : Iowa State University Press. Iowa state journal of research. Nov 1987. v. 62 (2). p. 279-292. Includes references. (NAL Call No.: DNAL 470 ID9).

0494

**Corn insects--above ground.**

Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. Jan 1985. (83,rev.). 2 p. ill. (NAL Call No.: DNAL SB844.I6P8).

0495

**Corn insects--below ground.**

Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. Jan 1985. (84,rev.). 2 p. ill. (NAL Call No.: DNAL SB844.I6P8).

0496

**Corn leaf aphid.**

Edwards, C.R. Bergman, M.K. Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. Nov 1985. (58). 2 p. (NAL Call No.: DNAL SB844.I6P8).

0497

**Corn leaf volatiles: identification using tenax trapping for possible insect attractants.**

Buttery, R.G. Ling, L.C. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Sept/Oct 1984. v. 32 (5). p. 1104-1106. Includes 12

references. (NAL Call No.: 381 J8223).

0498

**Corn leafhopper: the making of an insect pest.** DRRDA. Nault, L.R. Wooster, Ohio : The Center. Ohio report on research and development in agriculture, home economics, and natural resources - Ohio Agricultural Research and Development Center. Sept/Oct 1984. v. 69 (5). p. 77-78. ill. (NAL Call No.: DNAL 100 DH3S (3)).

0499

**Corn monoculture versus old field: effects of low levels of insecticides.**

ECDLA. Risch, S.J. Pimentel, D.; Grover, H. Tempe, Ariz : Ecological Society of America. Ecology : a publication of the Ecological Society of America. Apr 1986. v. 67 (2). p. 505-515. Includes references. (NAL Call No.: DNAL 410 EC7).

0500

**Corn pests.**

KAEBB. Garman, H. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. Dec 1909. (145,pt.2). p. 291-298. (NAL Call No.: DNAL 100 K41 (2)).

0501

**Corn phenology in relation to natural and simulated infestations of the sugarcane borer (Lepidoptera: Pyralidae).**

JEENAI. Flynn, J.L. Reagan, T.E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1984. v. 77 (6). p. 1524-1529. Includes references. (NAL Call No.: DNAL 421 J822).

0502

**The corn root aphid and methods of controlling it /John J. Davis.**

Davis, John June, 1885-. Packard, C. M. 1889-. Washington, D.C. : U.S. Dept. of Agriculture, 1949. Originally issued Dec. 1917.~ "This revision was prepared by C.M. Packard.". 7 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.891 1949).

0503

**The corn root-aphis and methods of controlling it /John J. Davis.**  
Davis, John June, 1885-. Washington, D.C. : U.S. Dept. of Agriculture, 1917. Cover title.~ "Contribution from the Bureau of Entomology.". 12 p. : ill. ; 23 cm. Bibliography: p. 12. (NAL Call No.: DNAL 1 Ag84F no.891).

0504

**The corn root-worms: Diabrotica 12-punctata and Diabrotica longicornis.**  
KAEBE. Garman, H. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. June 1907. (130,pt.2). p. 42-46. (NAL Call No.: DNAL 100 K41 (2)).

0505

**Corn rootworm beetles.**  
Townsend, L. Lexington : The Service. ENT - University of Kentucky, College of Agriculture, Cooperative Extension Service. May 1984. (45). 4 p. ill. (NAL Call No.: DNAL 275.29 K415E).

0506

**Corn rootworms (Coleoptera: Chrysomelidae): responses to eugenol and 8R-methyl-2R-decyl propanoate.**  
JEENAI. Ladd, T.L. Jr. Krysan, J.L.; Guss, P.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 845-847. Includes references. (NAL Call No.: DNAL 421 J822).

0507

**Corn soil insects research--1985 insecticide evaluations.**  
MAERA. Grundler, J.A. Keaster, A.J. Columbia : The Station. Special report - University of Missouri - Columbia, Agricultural Experiment Station. Includes statistical data. Nov 1985. (336). 37 p. (NAL Call No.: DNAL 100 M693SP).

0508

**Corn varieties for cinch-bug infested areas /by W.P. Flint and J.C. Hackleman.**  
Flint, W. P. 1882-. Hackleman, J. C. 1888-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, in cooperation with the Natural History Survey, Illinois Dept. of Registration and Education, 1923. Cover title. p. 539 -550 : ill. ; 23 cm. (NAL Call No.: DNAL 100 I16S no.243).

0509

**Correlation between leaf-feeding resistance to European corn borer (Lepidoptera: Pyralidae) and resistance to northern corn leaf blight.**  
JEENAI. Guthrie, W.D. Barry, B.D.; Rossman, E.C.; Jarvis, J.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 811-814. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0510

**The cotton bollworm an account of the insect, with results of experiments in 1903 /by A.L. Quaintance.**  
Quaintance, A. L. 1870-1958. Washington : U.S. Dept. of Agriculture, 1904. Cover title. 24 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.191).

0511

**Cover-crop effects on billbug damage to seedling corn and sorghum in conservation-tillage systems.**  
Gardner, W.A. All, J.N. Athens, Ga. : Agricultural Experiment Stations, University of Georgia, 1985? . Proceedings of the 1985 Southern Region No-Till Conference : July 16-17, 1985, Griffin, Georgia / edited by W.L. Hargrove and F.C. Boswell and G.W. Langdale. p. 205-207. Includes references. (NAL Call No.: DNAL S604.S6 1985).

0512

**Cutworms and their control in corn and other cereal crops /by W.R. Walton.**  
Walton, W. R. 1873-. Washington, D.C. : U.S. Dept. of Agriculture, 1922. Originally issued June 1916; Corr. and repr. Dec. 1922. 8 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.739 1922).

0513

**Cutworms and their control in corn and other cereal crops /by W.R. Walton and J.J. Davis.**  
Walton, W. R. 1873-. Davis, John June, 1885-. Washington, D.C. : U.S. Dept. of Agriculture, 1916. Caption title.~ "Contribution from the Bureau of Entomology.". 4 p. : ill. ; 23 cm. Bibliography: p. 4. (NAL Call No.: DNAL 1 Ag84F no.739).

## (PESTS OF PLANTS - INSECTS)

0514

### **Cutworms in corn.**

Bergman, M.K. Edwards, C.R. Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. Dec 1985. (48,rev.). 4 p. (NAL Call No.: DNAL SB844.I6P8).

0515

### **Cutworms in corn.**

Bergman, M.K. Edwards, C.R. West Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. In subseries: Field Crops Insects. Oct 1986. (48,rev.). 4 p. (NAL Call No.: DNAL SB844.I6P8).

0516

### **Damage and yield loss induced by stalk borer (Lepidoptera: Noctuidae) in field corn.**

JEENAI. Bailey, W.C. Pedigo, L.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1986. v. 79 (1). p. 233-237. Includes references. (NAL Call No.: DNAL 421 J822).

0517

### **Damage to corn caused by Euschistus servus, Euschistus variolarius, and Acrosternum hilare (Heteroptera: Pentatomidae) under greenhouse conditions.**

JEENAI. Townsend, L.H. Sedlacek, J.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1986. v. 79 (5). p. 1254-1258. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0518

### **Defense against insect attack in susceptible plants: black cutworm (Lepidoptera: Noctuidae) growth on corn seedlings and artificial diet.**

AESAAI. Reese, J.C. Field, M.D. College Park, Md. : The Society. Annals of the Entomological Society of America. Mar 1986. v. 79 (2). p. 372-376. Includes references. (NAL Call No.: DNAL 420 EN82).

0519

### **Defoliation by the armyworm (Lepidoptera: Noctuidae) on field corn in Iowa.**

JEENAI. Mulder, P.G. Showers, W.B. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1986. v. 79 (2). p. 368-373. Includes references. (NAL Call No.: DNAL 421 J822).

0520

### **Dent corn inbreds and hybrids resistant to the corn earworm in the South /by W.A. Douglas and R.C. Eckhardt.**

Douglas, W. A. 1906-. Eckhardt, R. C. 1913-. Washington : U.S. Dept. of Agriculture, 1957. 13 p. : ill. ; 23 cm. Literature cited: p. 13. (NAL Call No.: DNAL 1 Ag84Te no.1160).

0521

### **The desert corn flea-beetle /by V.L. Wildermuth.**

Wildermuth, V. L. 1885-. Washington, D.C. : U.S. Dept. of Agriculture, 1917. Caption title.~ "February 7, 1917."~ "Professional paper." 23 p., 1 leaf of plates : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84B no.436).

0522

### **Design and cost considerations in the sampling of northern and western corn rootworm (Coleoptera: Chrysomelidae) eggs.**

JEENAI. Hein, G.L. Tollefson, J.J.; Hinz, P.N. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1495-1499. Includes references. (NAL Call No.: DNAL 421 J822).

0523

### **Detasselling and insecticides for control of Ostrinia funacalis (Lepidoptera: Pyralidae) on sweet corn.**

JEENAI. Schreiner, I.H. Nafus, D.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1987. v. 80 (1). p. 263-267. Includes references. (NAL Call No.: DNAL 421 J822).

0524

### **Detecting and controlling the corn earworm in the Willamette Valley.**

Fisher, G.C. DeGomez, T. Corvallis, Or. : The Service. Extension circular - Oregon State University, Extension Service. Sept 1984. (1180). 4 p. ill. (NAL Call No.: DNAL 275.29 OR32C).

0525

### **Determination of instar of the European corn borer (Lepidoptera: Pyralidae) based on a distribution model of head capsule widths.**

AESAAI. Got, B. College Park, Md. : The Society. Annals of the Entomological Society of America. Jan 1988. v. 81 (1). p. 91-98. Includes references. (NAL Call No.: DNAL 420 EN82).

0526

**Determining yield loss by black cutworms on corn (Mathematical model).**  
Troester, S.U. Clement, S.L.; Showers, W.B.; Keaster, A.J. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-5026). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0527

**Development and behavior of black cutworm (Lepidoptera: Noctuidae) populations before and after corn emergence.**  
JEENAI. Showers, William B. Von Kaster, L.; Sappington, T.W.; Mulder, P.G.; Whitford, F. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1985. v. 78 (3). p. 588-594. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0528

**Development and production of corn earworm and fall armyworm in the Texas High Plains: evidence for reverse fall migration.**  
SENTD. Pair, S.D. Raulston, J.R.; Rummel, D.R.; Westbrook, J.K.; Wolf, W.W.; Sparks, A.N.; Schuster, M.F. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. June 1987. v. 12 (2). p. 89-99. maps. Includes references. (NAL Call No.: DNAL QL461.S65).

0529

**Development and reproduction of the predator Orius insidiosus (Hemiptera: Anthocoridae) reared on diets of selected plant material and arthropod prey.**  
AESAAI. Kiman, Z.B. Yeargan, K.V. College Park, Md. : The Society. Annals of the Entomological Society of America. July 1985. v. 78 (4). p. 464-467. Includes references. (NAL Call No.: DNAL 420 EN82).

0530

**Development and survival of pupae of Diabrotica virgifera virgifera and Diabrotica undecimpunctata howardi (Coleoptera: Chrysomelidae) at constant temperatures and humidities.**  
EVETEX. Fisher, J.R. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 626-630. Includes references. (NAL Call No.: DNAL

QL461.E532).

0531

**The development of an economic injury level for low populations of fall armyworm (Lepidoptera: Noctuidae) in grain corn.**  
FETMA. Harrison, F.P. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Sept 1984. v. 67 (3). p. 335-339. Includes 3 references. (NAL Call No.: DNAL 420 F662).

0532

**Development of greenbug (Homoptera: Aphididae) on corn: geographic variations in host-plant range of biotype E.**  
JEENAI. Michels, G.J. Jr. Kring, T.J.; Behle, R.W.; Bateman, A.C.; Heiss, N.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1987. v. 80 (2). p. 394-397. Includes references. (NAL Call No.: DNAL 421 J822).

0533

**Developments in the corn-borer battle /W.P. Flint, G.H. Dungan and A.L. Young.**  
Flint, W. P. 1882-. Dungan, George Harlan, 1887-; Young, A. L. 1889-. Urbana, Ill. : University of Illinois College of Agriculture and Agricultural Experiment Station, 1929. 1 sheet : map ; 28 x 22 cm. folded to 19 x 15 cm. (NAL Call No.: DNAL 275.29 IL62C no.334).

0534

**DIMBOA content at seven stages of plant development in a maize synthetic cultivar.**  
JKESA. Guthrie, W.D. Tseng, C.T.; Russell, W.A.; Coats, J.R.; Robbins, J.C.; Tollefson, J.U. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Apr 1986. v. 59 (2). p. 356-360. Includes references. (NAL Call No.: DNAL 420 K13).

0535

**Diseases in Illinois seed corn as found in the fifth utility corn show /by Benjamin Koehler and N.A. Pettinger.**  
Koehler, Benjamin, 1890-. Pettinger, Nicholas Albert, 1901-. Urbana, Ill. : University of Illinois Agricultural College and Experiment Station, 1925. 8 p. : ill., map ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.299).

## (PESTS OF PLANTS - INSECTS)

0536

Dispersion patterns and sampling of spider mites (Acari: Tetranychidae) infesting corn in the Texas High Plains.  
EVETEX. Pickett, C.H. Gilstrap, F.E. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1986. v. 15 (2). p. 335-341. Includes references. (NAL Call No.: DNAL QL461.E532).

0537

Dissemination of *Nosema pyrausta* in feral populations of the European corn borer, *ostrinia nubilalis*.  
JIVPA. Andreadis, T.G. Duluth, Minn. : Academic Press. Journal of invertebrate pathology. Nov 1986. v. 48 (3). p. 335-343. Includes references. (NAL Call No.: DNAL 421 J826).

0538

Distribution and orientation of western corn rootworm (Coleoptera: Chrysomelidae) larvae in corn roots.  
EVETEX. Strnad, S.P. Bergman, M.K. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1987. v. 16 (5). p. 1193-1198. Includes references. (NAL Call No.: DNAL QL461.E532).

0539

Distribution of early instars of second-generation European corn borer on the maize plant.  
Umezor, O.C. Van Duyn, J.W.; Bradley, J.R. Jr. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Jan 1987. v. 4 (1). p. 48-54. Includes references. (NAL Call No.: DNAL SB599.J69).

0540

Distribution of European corn borer (Lepidoptera: Pyralidae) egg masses and larvae on sweet corn in New York.  
EVETEX. Shelton, A.M. Nyrop, J.P.; Seaman, A.; Foster, R.E. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 501-506. Includes references. (NAL Call No.: DNAL QL461.E532).

0541

Distributions for European corn borer (Lepidoptera: Pyralidae) resistance ratings of S1 lines from 'BS9' corn.  
JEENAI. Klenke, J.R. Russell, W.A.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1986. v. 79 (4). p. 1076-1081. Includes references. (NAL Call No.: DNAL 421 J822).

0542

Drouth checks corn-borer advance in 1930 /W.P. Flint ... et al. .  
Flint, W. P. 1882-. Urbana, Ill. : University of Illinois College of Agriculture and Agricultural Experiment Station, 1931. 8 p. : ill., map ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.367).

0543

Dry cucurbitacin-containing baits for controlling Diabroticite beetles (Coleoptera: Chrysomelidae).  
JEENAI. Metcalf, R.L. Ferguson, J.E.; Lampman, R.; Andersen, J.F. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1987. v. 80 (4). p. 870-875. Includes references. (NAL Call No.: DNAL 421 J822).

0544

Durability of Pherocon AM trap for adult western and northern corn rootworm (Coleoptera: Chrysomelidae) sampling.  
JEENAI. Karr, L.L. Tollefson, J.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1987. v. 80 (4). p. 891-896. Includes references. (NAL Call No.: DNAL 421 J822).

0545

Ear damage in sweet corn in relation to adult corn earworm (Lepidoptera: Noctuidae) populations.  
JEENAI. Chowdhury, M.A. Chalfant, R.B.; Young, J.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1987. v. 80 (4). p. 867-869. Includes references. (NAL Call No.: DNAL 421 J822).

0546

Ecological studies of the European corn borer (Lepidoptera: Pyralidae) in Boone County, Iowa.  
EVETEX. Jarvis, J.L. Guthrie, W.D. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1987. v. 16 (1). p. 50-58. Includes references. (NAL Call No.: DNAL QL461.E532).

0547

Economic effectiveness: an alternate approach to insecticide evaluation in sweet corn.  
McLeod, P. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. July 1986. v. 3 (3). p. 272-279. Includes references. (NAL Call No.: DNAL SB599.J69).

0548

**Effect of chinch bug (Heteroptera: Lygaeidae) feeding in seedling field corn.**  
JEENAI. Negron, J.F. Riley, T.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1370-1372. Includes references. (NAL Call No.: DNAL 421 J822).

0549

**Effect of crop cover on oviposition of the northern corn rootworm, *Diabrotica longicornis barberi* Smith and Lawrence.**  
JKESA. Gustin, R.D. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. July 1984. v. 57 (3). p. 515-516. Includes 8 references. (NAL Call No.: DNAL 420 K13).

0550

**Effect of diflubenzuron on European corn borer larvae.**  
ISJRA6. Berry, E.C. Faragalla, A.A.; Lewis, L.C.; Guthrie, W.D. Ames, Iowa : Iowa State University Press. Iowa state journal of research. Aug 1986. v. 61 (1). p. 91-97. Includes references. (NAL Call No.: DNAL 470 I09).

0551

**Effect of distribution and density of *Heliothis zea* (Lepidoptera: Noctuidae) eggs on silking corn on the rate of larval establishment in the ear.**  
GENSAB. Gross, H.R. Jr. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. July 1986. v. 21 (3). p. 267-270. Includes references. (NAL Call No.: DNAL QL461.G4).

0552

**Effect of foxtail infestation on corn rootworm larvae (Coleoptera: Chrysomelidae) under two corn-planting dates.**  
EVETEX. Johnson, T.B. Turpin, F.T.; Bergman, M.K. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1984. v. 13 (5). p. 1245-1248. Includes references. (NAL Call No.: DNAL QL461.E532).

0553

**Effect of husk tightness and insect (Lepidoptera) infestation on aflatoxin contamination of preharvest maize.**  
EVETEX. Barry, D. Lillehoj, E.B.; Widstrom, N.W.; McMillan, W.W.; Zuber, M.S.; Kwolek, W.F.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Environmental

entomology. Dec 1986. v. 15 (6). p. 1116-1118. Includes references. (NAL Call No.: DNAL QL461.E532).

0554

**Effect of intermittent low temperatures on hatch of western corn rootworm eggs (Coleoptera: Chrysomelidae).**  
JKESA. Gustin, R.D. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. July 1986. v. 59 (3). p. 569-570. Includes references. (NAL Call No.: DNAL 420 K13).

0555

**Effect of polyculture system on Mexican bean beetle, leafhopper and corn earworm populations.**  
Mebrшту, T. Rangappa, M.; Benepal, P.S. Geneva, N.Y. : Bean Improvement Cooperative. Annual report of the Bean Improvement Cooperative. 1987. v. 30. p. 10-12. Includes references. (NAL Call No.: DNAL SB327.A1B5).

0556

**Effect of seed-treatment methods and soil water content on early growth and acephate uptake by corn and cotton plants.**  
Hill, R.L. Dalili, B.; Cruse, R.M.; Felsot, A.S. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1984. v. 77 (4). p. 880-884. Includes 16 references. (NAL Call No.: 421 J822).

0557

**Effect of three soil-applied insecticides in field corn on spider mite (Acari: Tetranychidae) pest potential.**  
JEENAI. Margolies, D.C. Kennedy, G.G.; Van Duyn, J.W. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 117-120. Includes references. (NAL Call No.: DNAL 421 J822).

0558

**Effectiveness of acephate and carbofuran seed treatments to control the black cutworm, *Agrotis ipsilon* (Lepidoptera: Noctuidae), on field corn.**  
JEENAI. Levine, E. Felsot, A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1415-1420. Includes references. (NAL Call No.: DNAL 421 J822).

## (PESTS OF PLANTS - INSECTS)

0559

**The effectiveness of cultivation as a control for the corn earworm /by G.W. Barber and F.F. Dicke.**

Barber, George W. 1890-1948. Dicke, F. F. 1899-. Washington : U.S. Dept. of Agriculture, 1937. Caption title. 16 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.561).

0560

**Effects of adult western corn rootworm (Coleoptera: Chrysomelidae) ear feeding on irrigated field corn in Colorado.**

JEENAI. Capinera, J.L. Epsky, N.D.; Thompson, D.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1609-1612. Includes references. (NAL Call No.: DNAL 421 J822).

0561

**Effects of corn phenology and temperature on the life cycle of the fall armyworm, Spodoptera frugiperda (Lepidoptera:Noctuidae).**

FETMA. Barfield, C.S. Ashley, T.R. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Mar 1987. v. 70 (1). p. 110-116. Includes references. (NAL Call No.: DNAL 420 F662).

0562

**Effects of corn phenology on spatial distribution and population estimation of adult Northern corn rootworms**

**(Coleoptera:Chrysomelidae) (Diabrotica longicornis barberi).**

Matin, M.A. Yule, W.N. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1984. v. 77 (5). p. 1176-1179. Includes 12 references. (NAL Call No.: 421 J822).

0563

**Effects of crop rotation, tillage, and weed management systems on black cutworm (Lepidoptera: Noctuidae) infestations in corn (following soybeans or wheat, Agrotis ipsilon).**

Johnson, T.B. Turpin, F.T.; Schreiber, M.M.; Griffith, D.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1984. v. 77 (4). p. 919-921. Includes 7 references. (NAL Call No.: 421 J822).

0564

**Effects of fluctuating diel temperatures on longevity and oviposition rate of adult female lesser cornstalk borers (Lepidoptera: Pyralidae).**

EVETEX. Mack, T.P. Backman, C.B. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 715-718. Includes references. (NAL Call No.: DNAL QL461.E532).

0565

**Effects of irrigation and kernel injury on aflatoxin B1 production in selected maize hybrids.**

PLDRA. Fortnum, B.A. Manwiller, A. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1985. v. 69 (3). p. 262-265. ill. Includes 22 references. (NAL Call No.: DNAL 1.9 P69P).

0566

**Efficacy of Heliothis pathogens.**

SCSBA. Yearian, W.C. Hamm, J.J.; Carner, G.R. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Literature review. Feb 1986. (316). p. 92-103. Includes 98 references. (NAL Call No.: DNAL 100 G29S0).

0567

**Elateridae larvae and control obtained with terbufos and phorate in first-year cornfields in Indiana.**

JKESA. Belcher, D.W. Tenne, F.D. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1987. v. 60 (1). p. 127-132. maps. Includes references. (NAL Call No.: DNAL 420 K13).

0568

**Electroantennogram responses of corn rootworms and other closely related Diabrotica (Coleoptera: Chrysomelidae) to sex pheromones and synthetic attractants.**

JKESA. Wilkin, P.J. Krysan, J.L.; Guss, P.L. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Oct 1986. v. 59 (4). p. 571-579. ill. Includes references. (NAL Call No.: DNAL 420 K13).

0569

**The end of corn rootworm.**

DeVault, G. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. Feb 1986. v. 8 (2). p. 25-28. ill. (NAL Call No.: DNAL S1.N32).

0570

**The enemies hypothesis: tritrophic interactions and vegetational diversity in tropical agroecosystems.**

ECOLA. Letourneau, D.K. Tempe, Ariz : Ecological Society of America. Ecology : a publication of the Ecological Society of America. Dec 1987. v. 68 (6). p. 1616-1622. ill. Includes references. (NAL Call No.: DNAL 410 EC7).

0571

**Environmental effects on production of primary and secondary conidia, infection, and pathogenesis of *Neozygites floridana*, a pathogen of the twospotted spider mite, *Tetranychus urticae*.**

JIVPA. Smitley, D.R. Brooks, W.M.; Kennedy, G.G. Orlando, Fla. : Academic Press. Journal of invertebrate pathology. May 1986. v. 47 (3). p. 325-332. Includes references. (NAL Call No.: DNAL 421 J826).

0572

**Epizzotiology of *Nosema pyrausta* in field populations of the European corn borer (Lepidoptera:Pyralidae) (*Ostrinia nubilalis*).**

Andreadis, T.G. College Park, Md. : Entomological Society of America. Environmental entomology. June 1984. v. 13 (3). p. 882-887. Includes references. (NAL Call No.: QL461.E532).

0573

**Escape behavior of *Dalbulus* and *Balbulus* leafhoppers (Homoptera: Cicadellidae).**

EVETEX. Heady, S.E. Nault, L.R. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1985. v. 14 (2). p. 154-158. Includes references. (NAL Call No.: DNAL QL461.E532).

0574

**Establishment and damage of the sugarcane borer (Lepidoptera: Pyralidae) in corn as influenced by plant development (*Diatraea saccharalis*, Zea mays).**

Flynn, J.L. Reagan, T.E.; Ogunwolu, E.O. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 691-697. Includes references. (NAL Call No.: 421 J822).

0575

**European corn borer.**

Edwards, C.R. Bergman, M.K.; Matthew, D.L. Jr. Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. Subseries: Field crops insects. Nov 1985. (17,rev.). 6 p. ill., maps. (NAL Call No.: DNAL SB844.I6P8).

0576

**European corn borer.**

Edwards, C.R. Bergman, M.K.; Matthew, D.L. Jr. West Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. In subseries: Field Crops Insects. Oct 1986. (17,rev.). 6 p. ill., maps. (NAL Call No.: DNAL SB844.I6P8).

0577

**The European corn borer /D.J. Caffrey.**

Caffrey, D. J. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 23 cm. Cover title.~ "Contribution from the Bureau of Entomology.". 28 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1046).

0578

**The European corn borer how to control it /prepared by Entomology Research Division, Agricultural Research Service.**

Washington, D.C. : U.S. Dept. of Agriculture, 1968. Originally issued in 1962; rev. June 1967. 20 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.2190 1968).

0579

**The European corn borer its present status and methods of control /by D.J. Caffrey.**

Caffrey, D. J. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 1935. Originally issued Oct. 1927.~ "The original edition of this bulletin was written by D.J. Caffrey and L.H. Worthley.". 39 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1548 1935).

0580

**The European corn borer its present status and methods of control /by D.J. Caffrey and L.H. Worthley.**

Caffrey, D. J. 1886-. Worthley, L. H. 1877-. Washington, D.C. : U.S. Dept. of Agriculture, 1927. "This bulletin supersedes Farmers' bulletin 1294.". 48 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1548).

## (PESTS OF PLANTS - INSECTS)

0581

**The European corn borer and its control /by C.J. Drake, G.C. Decker and H.M. Harris.**  
Drake, Carl John, 1885-. Decker, G. C. 1898-; Harris, H. M. Ames, Iowa : Agricultural Experiment Station, Agricultural Extension Service, Iowa State College, 1944. Caption title. p. 924-936 : ill., map ; 23 cm. (NAL Call No.: DNAL 100 Io9 no.P60).

0582

**The European corn borer and its control /D.J. Caffrey and L.G. Worthley.**  
Caffrey, D. J. 1886-. Worthley, L. H. 1877-. Washington, D.C. : U.S. Dept. of Agriculture, 1922. Cover title. 45 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1294).

0583

**The European corn borer and its control /prepared by Entomology Research Branch, Agricultural Research Service.**  
Washington, D.C. : U.S. Dept. of Agriculture, 1955. "Supersedes Farmers' bulletin 1548: The European corn borer: its present status and methods of control.". 20 p. : ill., map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.2084).

0584

**European corn borer in Kentucky.**  
KAEBA. Ritcher, P.D. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. May 1947. (502). 23 p. ill., maps. Includes 5 references. (NAL Call No.: DNAL 100 K41 (2)).

0585

**The European corn borer is in your fields.**  
Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1942. Cover title.~ In cooperation with the Illinois Natural History Survey. 1 sheet : ill., map ; 30 x 22 cm. folded to 10 x 22 cm. (NAL Call No.: DNAL 275.29 I162c no.539).

0586

**European corn borer (Lepidoptera:Pyralidae) and its parasitoid Lydella thompsoni (Diptera:Tachinidae) in Delaware.**  
JKESA. Burbutis, P.P. Mason, C.E.; Romig, R.F. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. July 1984. v. 57 (3). p. 394-399. Includes 18 references. (NAL Call No.: DNAL 420 K13).

0587

**European corn borer (Lepidoptera: Pyralidae) damage to maize in eastern North Carolina.**  
JEENAI. Umeozor, D.C. Van Duyn, J.W.; Kennedy, G.G.; Bradley, J.R. Jr. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1488-1394. Includes references. (NAL Call No.: DNAL 421 J822).

0588

**European corn borer (Lepidoptera: Pyralidae) infestations: predicting second generation egg masses from blacklight trap captures and relating their abundance to several corn crop characters.**  
JEENAI. Legg, D.E. Chiang, H.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1984. v. 77 (6). p. 1432-1438. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0589

**European corn borer (Lepidoptera: Pyralidae) infestations: relating captures in pheromone and black-light traps in southern Minnesota cornfields.**  
JEENAI. Legg, D.E. Chiang, H.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1984. v. 77 (6). p. 1445-1448. Includes references. (NAL Call No.: DNAL 421 J822).

0590

**European corn borer (Lepidoptera: Pyralidae) leaf-feeding resistance and DIMBOA content in inbred lines of dent maize grown under field versus greenhouse conditions.**  
JEENAI. Guthrie, W.D. Wilson, R.L.; Coats, J.R.; Robbins, J.C.; Tseng, C.T.; Jarvis, J.L.; Russell, W.A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1492-1496. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0591

**European corn borer (Lepidoptera: Pyralidae) oviposition preference and survival on sunflower and corn.**  
EVETEX. Legg, D.E. Schenk, T.C.; Chiang, H.C. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 631-634. Includes references. (NAL Call No.: DNAL QL461.E532).

0592

European corn borer (Lepidoptera: Pyralidae): rate of first-generation larval mortality in sorghum hybrids compared with inbred lines of maize during the whorl stage of plant development (*Ostrinia nubilalis*). Dharmalingam, S. Guthrie, W.D.; Jarvis, J.L.; Kindler, D.; Atkins, R.E.; Tseng, C.T.; Zhou, D. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1984. v. 77 (4). p. 929-931. Includes 8 references. (NAL Call No.: 421 J822).

0593

European corn borer (Lepidoptera: Pyralidae): yield losses and damage in popcorn in relation to hybrid and stage of plant development. JEENAI. Jarvis, J.L. Ziegler, K.E.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 764-768. Includes references. (NAL Call No.: DNAL 421 J822).

0594

European corn borer location on the corn plant as related to insecticidal control /by C.H. Batchelder.

Batchelder, C. H. 1891-. Washington : U.S. Dept. of Agriculture, 1949. Caption title. 20 p. : ill. ; 23 cm. Literature cited: p. 20. (NAL Call No.: DNAL 1 Ag84Te no.976).

0595

European corn borer: rate of second-generation larval mortality in sorghum hybrids compared with inbred lines of maize during anthesis. Guthrie, W.D. Dharmalingam, S.; Jarvis, J.L.; Kindler, D.; Atkins, R.E.; Tseng, C.T.; Zhou, D. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Literature review. July 1984. v. 1 (3). p. 273-281. ill. Includes references. (NAL Call No.: DNAL SB599.J69).

0596

The European corn borera menace to the country's corn crop /D.J. Caffrey. --. Caffrey, D. J. Washington, D.C. : U.S. Dept. of Agriculture, 1919. 32 p. : ill., map --. Bibliography: p. 29-30. (NAL Call No.: DNAL Fiche S-70 no.1046).

0597

The European corn borer how to control it / prepared by Entomology Research Division, Agricultural Research Service . --. Washington, D.C. : U.S. Dept. of Agriculture, 1968. 14 p. : ill. --. (NAL Call No.: DNAL Fiche S-70 no.2190 1968).

0598

The European corn borer its present status and methods of control / by W.A. Baker and W.G. Bradley . --.

Baker, W. A. Washington, D.C. : U.S. Dept. of Agriculture, 1948. ii, 46 p. : ill., map --. (NAL Call No.: DNAL Fiche S-70 no.1548 1948).

0599

European corn borers in corn.

Townsend, L. Lexington : The Service. ENT - University of Kentucky, College of Agriculture, Cooperative Extension Service. Apr 1987. (49). 3 p. ill. (NAL Call No.: DNAL 275.29 K415E).

0600

An evaluation of a portable geiger counter to trace radiolabeled *Heliothis zea* (Boddie) (Lepidoptera: Noctuidae) larvae in corn and cotton.

GENSAB. Farrar, R.R. Jr. Landis, D.A. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 62-65. Includes references. (NAL Call No.: DNAL QL461.G4).

0601

An evaluation of chemigation for southwestern corn borer control.

Michels, G.J. Behle, R.W. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. Apr 1986. (4361). 5 p. (NAL Call No.: DNAL 100 T31P).

0602

Evaluation of corn inbred lines for resistance to stalk borer, *Papaipema nebris*.

Peterson, R.K.D. Hutchins, S.H.; Lasack, P.M. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Jan 1987. v. 4 (1). p. 66-71. Includes references. (NAL Call No.: DNAL SB599.J69).

## (PESTS OF PLANTS - INSECTS)

0603

**Evaluation of fumigants for control of insects attacking wheat and corn in steel bins /by H.H. Walkden and R.B. Schwitzgebel.**

Walkden, H. H. 1893-. Schwitzgebel, R. B. 1918-. Washington : U.S. Dept. of Agriculture, 1951. Caption title. 20 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84Te no.1045).

0604

**Evaluation of insecticides for control of fall armyworms on sweet corn--fall, 1984.**

Foster, R.E. Belle Glade : The Center. Belle Glade EREC research report EV - Florida University Agricultural Research and Education Center. Includes statistical data. Mar 1985. (1985-4). 9 p. (NAL Call No.: DNAL 100 F663).

0605

**Evaluation of maize single-cross hybrids and inbred lines for resistance to 3rd-instar lack cutworm larvae (Lepidoptera: Noctuidae) (Agrotis ipsilon, Zea mays).**

Tysen, C.T. Tollefson, J.U.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 565-568. ill. Includes references. (NAL Call No.: 421 J822).

0606

**Evaluation of selected corn plant introductions for silk-feeding resistance to corn earworm (Lepidoptera: Noctuidae).**

JEENAI. Wilson, R.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1987. v. 80 (5). p. 1048-1050. Includes references. (NAL Call No.: DNAL 421 J822).

0607

**Evaluation of trapping methods for southwestern corn borer (Lepidoptera: Pyralidae) using synthetic sex pheromone.**

JEENAI. Davis, F.M. Bird, T.G.; Knutson, A.E.; Ng, S.S. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1986. v. 79 (5). p. 1385-1389. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0608

**Evaluation of two arthropod vectors as inoculators of developing maize ears with Aspergillus flavus.**

EVETEX. Barry, D. Zuber, M.S.; Lillehoj, E.B.; McMillian, W.W.; Adams, N.U.; Kwolek, W.F.; Widstrom, N.W. College Park, Md. :

Entomological Society of America. Environmental entomology. Oct 1985. v. 14 (5). p. 634-636. Includes references. (NAL Call No.: DNAL QL461.E532).

0609

**Evaluation of two procedures to select for resistance to the European corn borer in a synthetic cultivar maize DIMBOA .**

CRPSAY. Tseng, C.T. Guthrie, W.D.; Russell, W.A.; Robbins, J.C.; Coats, J.R.; Tollefson, J.U. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1984. v. 24 (6). p. 1129-1133. Includes references. (NAL Call No.: DNAL 64.8 C883).

0610

**Evaluations of insecticides for control of corn earworm (Heliothis zea Boddie; Lepidoptera: Noctuidae) on sweet corn in northwestern New Mexico, 1979-1983.**

AAREEZ. Arnold, R.N. Gregory, E.U.; Smeal, D. New York : Springer. Applied agricultural research. 1986. v. 1 (3). p. 172-174. Includes references. (NAL Call No.: DNAL S539.5.A77).

0611

**Evidence for regional differences in the emergence pattern of the European corn borer (Lepidoptera: Pyralidae) in Quebec.**

JEENAI. Boivin, G. Ritchot, C.; Martel, P.; McLeod, D.G.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1986. v. 79 (4). p. 978-980. maps. Includes references. (NAL Call No.: DNAL 421 J822).

0612

**Experiments on breeding corn resistant to the European corn borer /by Marion T. Meyers ... et al. .**

Meyers, Marion T. 1892-. Washington : U.S. Dept. of Agriculture, 1937. Caption title. 30 p. : ill. ; 23 cm. Literature cited: p. 28-29. (NAL Call No.: DNAL 1 Ag84Te no.583).

0613

**Experiments with repellents against the corn root-aphis, 1905 and 1906 /by Stephen A. Forbes.**

Forbes, Stephen Alfred, 1844-1930. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1908. Cover title. 28 p. ; 23 cm. (NAL Call No.: DNAL 100 I16S no.130).

0614

**Extended diapause: Northern corn rootworm adapts to crop rotation.**

CRSOA. Ostlie, K.R. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. June/July 1987. v. 39 (8). p. 23-25. maps. (NAL Call No.: DNAL 6 W55).

0615

**Factors affecting the response of the maize weevil, *Sitophilus zeamais* (Coleoptera: Curculionidae), to its aggregation pheromone.**

EVETEX. Walgenbach, C.A. Burkholder, W.E. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 733-738. Includes references. (NAL Call No.: DNAL QL461.E532).

0616

**Fall armyworm: expressions of antibiosis in selected grasses.**

GENSAB. Chang, N.T. Wiseman, B.R.; Lynch, R.E.; Habeck, D.H. Tifton, Ga. : The Society. Journal of Entomological Science. Apr 1985. v. 20 (2). p. 179-188. ill. Includes references. (NAL Call No.: DNAL QL461.G4).

0617

**Fall armyworm (Lepidoptera: Noctuidae) feeding responses on corn foliage and foliage/artificial diet medium mixtures at different temperatures.**

JEENAI. Isenhour, D.J. Wiseman, B.R.; Widstrom, N.W. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1985. v. 78 (2). p. 328-332. Includes references. (NAL Call No.: DNAL 421 J822).

0618

**Fall armyworm (Lepidoptera: Noctuidae): field survival of F1 larvae from partially sterile parents.**

FETMA. Carpenter, J.E. Young, J.R.; Sparks, A.N. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. June 1985. v. 68 (2). p. 290-296. Includes references. (NAL Call No.: DNAL 420 F662).

0619

**Fall armyworm (Lepidoptera: Noctuidae) parasitoids: differential spring distribution and incidence on corn and sorghum in the southern United States and northeastern Mexico.**

EVETEX. Pair, S.D. Raulston, J.R.; Sparks, A.N.; Martin, P.B. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1986. v. 15 (2). p. 342-348. maps. Includes references. (NAL Call No.: DNAL

QL461.E532).

0620

**Farm practices under corn-borer conditions /by Jesse W. Tapp, George W. Collier and C.R. Arnold.**

Tapp, Jesse W. 1898-. Collier, George W. 1897-; Arnold, C. R. 1891-. Washington, D.C. : U.S. Dept. of Agriculture, 1928. 21 p. : ill., 4 maps ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1562).

0621

**Feeding activity of *Sitophilus zeamais* (Coleoptera: Curculionidae) on resistant and susceptible corn genotypes.**

EVETEX. Tipping, P.W. Rodriguez, J.G.; Poneleit, C.G.; Legg, D.E. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 654-658. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

0622

**Feeding preferences and consumption rates of stalk borer (Lepidoptera: Noctuidae) larvae using plants found in no-till corn.**

EVETEX. Highland, H.B. Roberts, J.E. Sr. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1987. v. 16 (6). p. 1235-1240. Includes references. (NAL Call No.: DNAL QL461.E532).

0623

**Field evaluation of insecticides for control of larvae of corn rootworms.**

Mayo, Z.B. Jr. New York : Springer-Verlag, c1986. Methods for the study of pest Diabrotica / edited by James L. Krysan, Thomas A. Miller, with contributions by J.F. Andersen ... et al. . In the series analytic: Springer series in experimental entomology / edited by T.A. Miller. ~ Literature review. p. 183-203. ill. Includes references. (NAL Call No.: DNAL SB945.D48M47).

0624

**Field experiments and observations on insects injurious to Indian corn /by S.A. Forbes.**

Forbes, Stephen Alfred, 1844-1930. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1905. Cover title. 2 p., p. 95-152 : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 100 I16S no.104).

## (PESTS OF PLANTS - INSECTS)

0625

Field termination of egg diapause in *Diabrotica* with new evidence of extended diapause in *Diabrotica barberi* (Coleoptera: Chrysomelidae). EVETEX. Krysan, J.L. Jackson, J.J.; Lew, A.C. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1984. v. 13 (5). p. 1237-1240. Includes references. (NAL Call No.: DNAL QL461.E532).

0626

Fighting the chinch bug on Illinois farms /by W.P. Flint, G.H. Dungan, and J.H. Bigger. Flint, W. P. 1882-. Dungan, George Harlan, 1887-; Bigger, J. H. 1898-. Urbana, Ill. : University of Illinois College of Agriculture, Agricultural Experiment Station and Extension Service, 1935. 16 p. : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.431).

0627

Fighting the corn borer with machinery in the two-generation area /by C.O. Reed ... et al. Reed, C. O. 1885-1940. Washington, D.C. : U.S. Dept. of Agriculture, 1930. Caption title. ~ "Most of the information on plows and plowing beginning on page 20 is taken by permission from copyrighted bulletin 80, Plows and good plowing, by C.D. Reed and E.A. Silver, published by the Agricultural Extension Service of Ohio State University.". 50 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.132).

0628

First instar western corn rootworm (Coleoptera: Chrysomelidae) response to carbon dioxide. EVETEX. Strnad, S.P. Bergman, M.K.; Fulton, W.C. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1986. v. 15 (4). p. 839-842. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

0629

Foliage consumption and development of the fall armyworm (Lepidoptera: Noctuidae) as affected by the interactions of a parasitoid, *Campoletis sonorensis* (Hymenoptera: Ichneumonidae), and resistant corn genotypes. EVETEX. Isenhour, D.J. Wiseman, B.R. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1987. v. 16 (5). p. 1181-1184. Includes references. (NAL Call No.: DNAL QL461.E532).

0630

Food quality of various plant tissues for adults of the northern corn rootworm (Coleoptera: Chrysomelidae). JKESA. Lance, D.R. Fisher, J.R. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. July 1987. v. 60 (3). p. 462-466. Includes references. (NAL Call No.: DNAL 420 K13).

0631

Frequency and severity of attack of several pest insects on corn in Iowa. JKESA. Foster, R.E. Tollefson, J.J. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Apr 1986. v. 59 (2). p. 269-274. Includes references. (NAL Call No.: DNAL 420 K13).

0632

Functional responses and switching of *Tetragnatha laboriosa* Hentz (Araneae: Tetragnathidae) and *Clubiona pikei* Gertsch (Araneae: Clubionidae) for the aphids *Rhopalosiphum maidis* (Fitch) and *Rhopalosiphum padi* (L.) (Homoptera: Aphididae). EVETEX. Provencher, L. Coderre, D. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1987. v. 16 (6). p. 1305-1309. Includes references. (NAL Call No.: DNAL QL461.E532).

0633

Genetic differentiation and its bearing on migration in North American populations of the corn leaf aphid, *Rhopalosiphum maidis* (Fitch) (Homoptera: Aphididae). AESAAI. Steiner, W.W.M. Voegtlin, D.J.; Irwin, M.E. College Park, Md. : The Society. Annals of the Entomological Society of America. July 1985. v. 78 (4). p. 518-525. ill., maps. Includes references. (NAL Call No.: DNAL 420 EN82).

0634

Genetic population structure of migratory moths: the fall armyworm (Lepidoptera: Noctuidae). AESAAI. Pashley, D.P. Johnson, S.J.; Sparks, A.N. College Park, Md. : The Society. Annals of the Entomological Society of America. Nov 1985. v. 78 (6). p. 756-761. maps. Includes references. (NAL Call No.: DNAL 420 EN82).

0635

**Grain yield reduction caused by second generation European corn borer in BS9 corn synthetic.**

CRPSAY, Klenke, J.R. Russell, W.A.; Guthrie, W.D. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 859-863. Includes references. (NAL Call No.: DNAL 64.8 C883).

0636

**Granular fonofos: efficacy and timing of applications for European corn borer management.**

Straub, R.W. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. July 1986. v. 3 (3). p. 286-291. Includes references. (NAL Call No.: DNAL SB599.J69).

0637

**Greenhouse and field evaluations of granular soil insecticides for control of sugarcane beetle, *Eutheola rugiceps* (Coleoptera: Scarabaeidae) in field corn.**

FETMA, Riley, T.J. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. June 1986. v. 69 (2). p. 390-394. Includes references. (NAL Call No.: DNAL 420 F662).

0638

**Greenhouse method for studying development and survival of *Diabrotica virgifera* (Coleoptera: Chrysomelidae).**

JEENAI, Fisher, J.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1987. v. 80 (1). p. 286-289. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0639

**Growth response of corn earworm (*Lepidoptera: Noctuidae*) larvae on meridic diets containing fresh and lyophilized corn silk (*Heliothis zea*).**

Wilson, R.L. Wiseman, B.R.; Windstrom, N.W. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1984. v. 77 (5). p. 1159-1162. Includes 13 references. (NAL Call No.: 421 J822).

0640

**Heat and time of exposure necessary to kill larvae of the European corn borer in ear corn /by George W. Barber.**

Barber, George W. 1890-1948. Washington, D.C. : U.S. Dept. of Agriculture, 1929. Caption title.~ "This circular is a summary of a

detailed report on the investigations which is on file in the Bureau of Entomology."~ "Contribution from Bureau of Entomology." 14 p. : ill., charts ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.71).

0641

***Heliothis zea* (Boddie): Formulation parameters for its sex pheromone in rubber septa.**

SENTD, Halfhill, J.E. McDonough, L.M. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Sept 1985. v. 10 (3). p. 176-180. Includes references. (NAL Call No.: DNAL QL461.S65).

0642

**Hibernation of the corn earworm in southeastern Georgia /by G.W. Barber.**

Barber, George W. 1890-1948. Washington : U.S. Dept. of Agriculture, 1941. Caption title. 17 p. ; 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.791).

0643

**Hibernation of the corn earworm in the central and northeastern parts of the United States /by R.A. Blanchard.**

Blanchard, R. A. 1900-. Washington : U.S. Dept. of Agriculture, 1942. Caption title. 14 p. : ill., 1 map ; 23 cm. Literature cited: p. 13. (NAL Call No.: DNAL 1 Ag84Te no.838).

0644

**High-efficiency pheromone trap for the European corn borer (*Lepidoptera: Pyralidae*).**

JEENAI, Webster, R.P. Charlton, R.E.; Schal, C.; Carde, R.T. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1986. v. 79 (4). p. 1139-1142. Includes references. (NAL Call No.: DNAL 421 J822).

0645

**Horizontal transmission of *Nosema pyrausta* (*Microsporida: Nosematidae*) in the European corn borer, *Ostrinia nubilalis* (*Lepidoptera: Pyralidae*).**

EVETEX, Andreadis, T.G. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1987. v. 16 (5). p. 1124-1129. Includes references. (NAL Call No.: DNAL QL461.E532).

## (PESTS OF PLANTS - INSECTS)

0646

**The host plants of the European corn borer in New England /by Benjamin E. Hodgson.**  
Hodgson, Benjamin E. Washington : U.S. Dept. of Agriculture, 1928. Cover title. 64 p. : ill. ; 23 cm. Literature cited: p. 63. (NAL Call No.: DNAL 1 Ag84Te no.77).

0647

**How to reduce weevil waste in southern corn /C.H. Kyle.**  
Kyle, C. H. b. 1878. Washington, D.C. : U.S. Dept. of Agriculture, 1918. Cover title.~ "Contribution from the Bureau of Plant Industry."~ Bibliography: p. 8. 8 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.915).

0648

**Husker-shredders in corn-borer control /by I.F. Reed and W.R. Humphries.**  
Reed, I. F. 1903-. Humphries, W. R. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. 17 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1662).

0649

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. Horner, E.S.; Johnson, J.T.; Martin, F.G.; Peacock, H.A.; White, J.M. Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Nov 1976. (77-3). 9 p. (NAL Call No.: DNAL S540.A2F62).

0650

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. (coop.). Darby, J.F. (coop.); Horner, E.S. (coop.); Lundy, H.W. (coop.); Peacock, H.A. (coop.); Martin, F.G. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Nov 1974. (75-1). 5 p. (NAL Call No.: DNAL S540.A2F62).

0651

**Hybrid field corn variety tests in central, north, and west Florida.**  
Chapman, W.H. (coop.). Horner, E.S. (coop.); Johnson, J.T. (coop.); Martin, F.G. (coop.); Peacock, H.A. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Oct 1979. (80-3). 8 p. (NAL

Call No.: DNAL S540.A2F62).

0653

**Hybrid field corn variety tests in central, north, and west Florida.**  
Horner, E.S. (coop.). Martin, F.G. (coop.); Peacock, H.A. (coop.); Rich, J.R. (coop.); Stanley, R.L. Jr. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Oct 1980. (81-2). 9 p. (NAL Call No.: DNAL S540.A2F62).

0652

**Hybrid field corn variety tests in central, north, and west Florida.**  
Horner, E.S. (coop.). Martin, F.G. (coop.); Peacock, H.A. (coop.); Rich, J.R. (coop.); Stanley, R.L. Jr. (coop.); White, J.M. (coop.). Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. Nov 1983. (84-5). 8 p. (NAL Call No.: DNAL S540.A2F62).

0654

**Identification of the sex attractant pheromone of the southwestern corn borer *Diatraea grandiosella* Dyar.**  
JCECD. Hedin, P.A. Davis, F.M.; Dickens, J.C.; Burks, M.L.; Bird, T.G.; Knutson, A.E. New York, N.Y. : Plenum Press. Journal of chemical ecology. Nov 1986. v. 12 (11). p. 2051-2063. ill. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0655

**Impact of corn planting date on the population dynamics of corn rootworms (*Coleoptera:Chrysomelidae*) (*Diabrotica virgifera virgifera*, *Diabrotica barberi*).**  
Bergman, M.K. Turpin, F.T. College Park, Md. : Entomological Society of America. Environmental entomology. June 1984. v. 13 (3). p. 898-901. Includes references. (NAL Call No.: QL461.E532).

0656

**Impact of environmental factors on *Trichogramma pretiosum* reared on southwestern corn borer eggs (*Diatraea grandiosella*).**  
Calvin, D.D. Knapp, M.C.; Welch, S.M.; Poston, F.L.; Elzinga, R.J. College Park, Md. : Entomological Society of America. Environmental entomology. June 1984. v. 13 (3). p. 774-780. Includes references. (NAL Call No.: QL461.E532).

0657

**Impact of husk type and species of infesting insects on aflatoxin contamination in preharvest corn at Tifton, Georgia.**  
JESCEP. McMillian, W.W. Widstrom, N.W.; Wilson, D.M. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. Oct 1987. v. 22 (4). p. 307-310. Includes references. (NAL Call No.: DNAL QL461.G4).

0658

**Impact of insecticides on composition and abundance of ground-dwelling insect fauna in adult European corn borer (Lepidoptera: Pyralidae) action sites in Iowa.**  
EVETEX. Whitford, F. Showers, W.B. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1987. v. 16 (1). p. 231-236. Includes references. (NAL Call No.: DNAL QL461.E532).

0659

**An improved wireworm (Coleoptera: Elateridae) sampling technique for midwest cornfields.**  
JKESA. Kirfman, G.W. Keaster, A.U.; Story, R.N. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1986. v. 59 (1). p. 37-41. ill. Includes references. (NAL Call No.: DNAL 420 K13).

0660

**The infestation of corn ears by the European corn borer, and cribbed corn as an auxiliary source of infestation /by L.H. Patch.**  
Patch, L. H. 1896-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. Caption title. 8 p. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.275).

0661

**Influence of adult diet on damage to corn by larvae of the western corn rootworm, *Diabrotica virgifera virgifera* (Coleoptera: Chrysomelidae).**  
JEENAI. Fisher, J.R. Jackson, J.U.; Sutter, G.R.; Branson, T.F. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1986. v. 79 (1). p. 114-115. Includes references. (NAL Call No.: DNAL 421 J822).

0662

**Influence of application date on damage resulting from controlled infestations with eggs of *Diabrotica virgifera virgifera* (Coleoptera: Chrysomelidae).**  
JEENAI. Branson, T.F. Sutter, G.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v.

79 (3). p. 838-839. Includes references. (NAL Call No.: DNAL 421 J822).

0663

**Influence of color and height of eugenol-baited sticky traps on attractiveness to northern corn rootworm beetles (Coleoptera: Chrysomelidae) (*Diabrotica barberi*).**  
Ladd, T.L. Jr. Stinner, B.R.; Krueger, H.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 652-654. Includes references. (NAL Call No.: 421 J822).

0664

**Influence of corn plant density on corn root worm (Coleoptera: Chrysomelidae) population estimates.**  
EVETEX. Weiss, M.U. Mayo, Z.B. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1985. v. 14 (6). p. 701-704. Includes references. (NAL Call No.: DNAL QL461.E532).

0665

**The influence of cultural treatments on feeding damage of southern corn billbug (Coleoptera: Curculionidae) to corn.**  
GENSAB. Javid, A.M. All, J.N.; Laisa, J.S. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. July 1986. v. 21 (3). p. 276-282. Includes references. (NAL Call No.: DNAL QL461.G4).

0666

**Influence of flowering weeds associated with reduced tillage in corn on a black cutworm (Lepidoptera: Noctuidae) parasitoid, *Meteorus rubens* (Nees von Esenbeck) (*Agrotis ipsilon*).**  
Foster, M.A. Ruesink, W.G. College Park, Md. : Entomological Society of America. Environmental entomology. June 1984. v. 13 (3). p. 664-668. Includes references. (NAL Call No.: QL461.E532).

0667

**Influence of four corn cultivars on fall armyworm (Lepidoptera: Noctuidae) establishment and parasitization.**  
FETMA. Pair, S.D. Wiseman, B.R.; Sparks, A.N. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Presented at the "Fall Armyworm Symposium," 1985, Hollywood, Florida. Sept 1986. v. 69 (3). p. 566-570. Includes references. (NAL Call No.: DNAL 420 F662).

## (PESTS OF PLANTS - INSECTS)

0668

**Influence of infestation duration on southern corn billbug injury to corn.**

DuRant, J.A. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Oct 1984. v. 1 (4). p. 386-391. ill. Includes references. (NAL Call No.: DNAL SB599.J69).

0669

**Influence of population density of immatures on size, longevity, and fecundity of adult *Diabrotica virgifera virgifera* (Coleoptera: Chrysomelidae).**

EVETEX. Branson, T.F. Sutter, G.R. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1985. v. 14 (6). p. 687-690. Includes references. (NAL Call No.: DNAL QL461.E532).

0670

**Influence of tillage and western and northern corn rootworm (Coleoptera: Chrysomelidae) egg populations on larval populations and root damage.**

JEENAI. Gray, M.E. Tollefson, J.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1987. v. 80 (4). p. 911-915. Includes references. (NAL Call No.: DNAL 421 J822).

0671

**Inoculative releases of Phytoseiids (Acari) for the biological control of spider mites (Acari: Tetranychidae) in corn.**

EVETEX. Pickett, C.H. Gilstrap, F.E. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1986. v. 15 (4). p. 790-794. Includes references. (NAL Call No.: DNAL QL461.E532).

0672

**Insect control: field corn, sorghum and small grain 1986-1987.**

Moore, L. Barstow, B.; Cotty, S.; Lame, M. Tucson, Ariz. : The Service. Publication - Cooperative Extension Service, University of Arizona, College of Agriculture. 1986. (8615). 11 p. (NAL Call No.: DNAL S544.3.A6C6).

0673

**Insect damage and aflatoxin contamination in preharvest corn: influence of genotype and ear wetting.**

GENSAB. McMillian, W.W. Widstrom, N.W.; Wilson, D.M. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 66-68. Includes references. (NAL Call No.: DNAL

QL461.G4).

0674

**Insect distribution and insecticide-induced mortality in corn and potatoes as affected by plot size and location.**

JEENAI. Cantelo, W.W. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 741-748. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0675

**Insect infestation of corn roots in Illinois / J.H. Bigger and H.B. Petty.**

Bigger, J. H. 1898-. Petty, H. B. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1965. Cover title. 7. 1 p. ; 23 cm. (NAL Call No.: DNAL 100 I16S no.704).

0676

**Insect injuries to the seed and root of Indian corn / S.A. Forbes .**

Forbes, Stephen Alfred, 1844-1930. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1896. Caption title. p. 209-296 : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 100 I16S no.44).

0677

**Insect resistance in two recently released sweet corn inbreds, GTS1 and GTS2.**

GENSAB. Wiseman, B.R. Widstrom, N.W.; McMillian, W.W. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 16-19. Includes references. (NAL Call No.: DNAL QL461.G4).

0678

**Insect-resistant corn could increase world food.**

AGREA. Carriere, B. Washington, D.C. : The Administration. Agricultural research - U.S. Department of Agriculture, Agricultural Research Service. Feb 1985. v. 33 (2). p. 10-11. ill. (NAL Call No.: DNAL 1.98 AG84).

0679

**Insect vectors of maize dwarf mosaic virus and maize chlorotic dwarf virus.**

Knoke, J.K. Anderson, R.J.; Louie, R.; Madden, L.V.; Findley, W.R. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease

Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 130-138. Includes references. (NAL Call No.: DNAL SB608.M2155 1982).

0680

**Insecticidal control of underground insects of corn a report of a 5-year study /J.H. Bigger and R.A. Blanchard.**

Bigger, J. H. 1988-. Blanchard, R. A. 1900-. Urbana, Ill. : University of Illinois, Agricultural Experiment Station in cooperation with the Illinois Natural History Survey and the U.S. Department of Agriculture, 1959. Cover title.~ "This study was supported in part by Research and Marketing Act funds allocated to North Central project 19, "Pesticide Hazards"--P. 2 . ". 28 p. ; 23 cm. Bibliography: p. 28. (NAL Call No.: DNAL 100 I16S no.641).

0681

**Insecticidal effects of cyanolipids on three species of stored product insects, European corn borer (Lepidoptera:Pyrilidae) larvae, and striped cucumber beetle (Coleoptera:Chrysomelidae) (Oryzaephilus surinamensis, Tribolium confusum, Sitophilus oryzae, Acalymma vittata, Ostrinia nubilalis).** Mikolajczak, K.L. Madrigal, R.V.; Smith, C.R. Jr.; Reed, D.K. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1984. v. 77 (5). p. 1144-1148. Includes 18 references. (NAL Call No.: 421 J822).

0682

**Insecticide recommendations for conventional and no-tillage field corn--1987.** Townsend, L.H. Lexington : The Service. ENT - University of Kentucky, College of Agriculture, Cooperative Extension Service. Dec 1986. (16). 3 p. (NAL Call No.: DNAL 275.29 K415E).

0683

**Insecticide tolerance of ground- and foliage-dwelling spiders (Araneae) in European corn borer (Lepidoptera: Pyralidae) action sites.**

EVETEX. Whitford, F. Showers, W.B.; Edwards, G.B. College Park, Md. : Entomological Society of America. Environmental entomology. June 1987. v. 16 (3). p. 779-785. Includes references. (NAL Call No.: DNAL QL461.E532).

0684

**Interaction of northern and western corn rootworm larvae (Coleoptera: Chrysomelidae) in a controlled environment.**

EVETEX. Piedrahita, D. Ellis, C.R.; Bogart, J.P. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1985. v. 14 (2). p. 138-141. ill. Includes 8 references. (NAL Call No.: DNAL QL461.E532).

0685

**Interaction studies of methyl parathion, carbofuran, permethrin, and piperonyl butoxide applied to southwestern corn borer larvae (Lepidoptera: Pyralidae).**

JEENAI. Christian, M.L. Owens, J.C.; Lewis, B.E.; Davis, F.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 549-552. Includes references. (NAL Call No.: DNAL 421 J822).

0686

**Interactions between maize mosaic and maize stripe viruses in their insect vector, Peregrinus maidis, and in maize.**

PHYTAJ. Ammar, E.D. Gingery, R.E.; Nault, L.R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1987. v. 77 (7). p. 1051-1056. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

0687

**The Japanese beetle.**

Schuder, D.L. Edwards, C.R. Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. Jan 1979. (75). 2 p. ill. (NAL Call No.: DNAL SB844.I6P8).

0688

**Japanese beetle.**

Schuder, D.L. Edwards, C.R.; Bergman, M.K. West Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. In subseries: Ornamental Insects. Oct 1986. (75,rev.). 2 p. ill. (NAL Call No.: DNAL SB844.I6P8).

0689

**Key and diagnosis of the instars of the corn leaf aphid Rhopalosiphum maidis (Fitch).**

SENTD. Kring, T.U. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Dec 1985. v. 10 (4). p. 289-293. ill. Includes references. (NAL Call No.: DNAL QL461.S65).

## (PESTS OF PLANTS - INSECTS)

0690

Laboratory bioassay of crude extracts as anti-feedants for the southern corn rootworm (Coleoptera: Chrysomelidae).  
EVETEX. Villani, M.G. Meinke, L.U.; Gould, F. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1985. v. 14 (5). p. 617-619. Includes references. (NAL Call No.: DNAL QL461.E532).

0691

Laboratory biology of *Diabrotica tibialis* and a closely related *Diabrotica* species (Coleoptera: Chrysomelidae).  
JKESA. Branson, T.F. Krysan, J.L. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. July 1987. v. 60 (3). p. 446-450. Includes references. (NAL Call No.: DNAL 420 K13).

0692

Laboratory life table studies of the blackfaced leafhopper (Homoptera: Cicadellidae) on Johnsongrass and corn.  
EVETEX. Sedlacek, J.D. Yeargan, K.V.; Freytag, P.H. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1119-1123. Includes references. (NAL Call No.: DNAL QL461.E532).

0693

Laboratory method for screening corn for European corn borer (Lepidoptera: Pyralidae) resistance.  
JEENAI. Wilson, R.L. Wissink, K.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1986. v. 79 (1). p. 274-276. Includes references. (NAL Call No.: DNAL 421 J822).

0694

Laboratory transmission of maize chlorotic mottle virus by three species of corn rootworms.  
PLDRA. Jensen, S.G. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1985. v. 69 (10). p. 864-868. Includes 15 references. (NAL Call No.: DNAL 1.9 P69P).

0695

The larger corn stalk-borer /by George G. Ainslie.  
Ainslie, George G. 1886-1930. Washington, D.C. : U.S. Dept. of Agriculture, 1914. Caption title.~ "Contribution from the Bureau of Entomology.". 8 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.634).

0696

The larger corn stalk-borer /George G. Ainslie.  
Ainslie, George G. 1886-1930. Phillips, W. J. 1879-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. "This revision was made by W.J. Phillips.". 6 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1025 1933).

0697

The larger corn stalk-borer /George G. Ainslie.  
Ainslie, George G. 1886-1930. Washington, D.C. : U.S. Dept. of Agriculture, 1919. Cover title.~ "This publication supersedes Farmers' bulletin 634.". 12 p. : ill., 1 map ; 23 cm. Bibliography: p. 12. (NAL Call No.: DNAL 1 Ag84F no.1025).

0698

Larval feeding behavior and host-plant resistance in maize.  
Branson, T.F. New York : Springer-Verlag, c1986. Methods for the study of pest *Diabrotica* / edited by James L. Krysan, Thomas A. Miller, with contributions by J.F. Andersen ... et al. . In the series analytic: Springer series in experimental entomology / edited by T.A. Miller.~ Literature review. p. 159-182. ill. Includes references. (NAL Call No.: DNAL SB945.D48M47).

0699

Larval growth and behavior of the fall armyworm (Lepidoptera: Noctuidae) on callus initiated from susceptible and resistant corn hybrids.  
JEENAI. Williams, W.P. Buckley, P.M.; Davis, F.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 951-954. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0700

Learning to live with the European corn borer /by W.P. Flint ... et al. .  
Flint, W. P. 1882-. Urbana, Ill. : University of Illinois College of Agriculture and Agricultural Experiment Station, 1928. "This circular is a revision of no. 313, issued in January, 1927.". 15 p., 2 leaves of plates : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.321).

0701

Learning to live with the European corn borer /by W.P. Flint, J.C. Hackleman, and F.C. Bauer.  
Flint, W. P. 1882-. Hackleman, J. C. 1888-; Bauer, F. C. 1886-. Urbana, Ill. : University of Illinois College of Agriculture and Agricultural Experiment Station, 1927. 15 p. :

ill. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.313).

0702

**Legume cover cropping, no-till practices, and soil arthropods: ecological interactions and agronomic significance.**

House, G.J. Crossley, D.A. Jr. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 68-69. Includes references. (NAL Call No.: DNAL SB203.R6).

0703

**The lesser corn stalk-borer /by Philip Luginbill and Geo. G. Ainslie.**

Luginbill, Philip, 1884-. Ainslie, George G. 1886-1930. Washington, D.C. : U.S. Dept. of Agriculture, 1917. Caption title.~ "September 8, 1917."~ "Professional paper.". 27 p., 2 leaves of plates : 1 map ; 24 cm. Bibliography: p. 25-27. (NAL Call No.: DNAL 1 Ag84B no.539).

0704

**Lethal and sublethal effects of *Nosema pyrausta* on the European corn borer (*Ostrinia nubilalis*) in central Illinois.**

JIVPA. Siegel, J.P. Maddox, J.V.; Ruesink, W.G. Duluth, Minn. : Academic Press. Journal of invertebrate pathology. Sept 1986. v. 48 (2). p. 167-173. Includes references. (NAL Call No.: DNAL 421 J826).

0705

**The life-history and habits of the corn-ear worm (*Chloridea obsoleta*).**

KAEB. Garman, H. Jewett, H.H. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. Dec 1914. (187). p. 511-591. ill., plates. (NAL Call No.: DNAL 100 K41 (2)).

0706

**A List of references, maize virus and mycoplasma diseases.**

Wooster, Ohio : Maize Virus Information Service, Ohio Agricultural Research Development Center, 1981-. Title from cover.~ Each list is an addendum to the previous list. v. ; 28 cm. (NAL Call No.: DNAL Z5354.P3C58).

0707

**Location of *Ostrinia furnacalis* (Lepidoptera: Pyralidae) eggs and larvae on sweet corn in relation to plant growth stage.**

JEENAI. Nafus, D.M. Schreiner, I.H. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1987. v. 80 (2). p. 411-416. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0708

**Location of the benzoxazinless (bx) locus in maize by monosomic and B-A translocational analyses.**

CRPSAY. Simcox, K.D. Weber, D.F. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1985. v. 25 (5). p. 827-830. Includes references. (NAL Call No.: DNAL 64.8 C883).

0709

**Look for the European corn borer / S.B. Fracker and C.L. Fluke .**

Fracker, Stanley Black, 1889-. Fluke, C. L. 1891-. Madison : Agricultural Experiment Station, University of Wisconsin, 1926. Cover title.~ Running title: European corn borer.~ "July, 1926".~ WI docs. no.: Agr.3:75. 8 p. : ill. ; 23 cm. (NAL Call No.: DNAL 100 W75 (1) no.385).

0710

**Lookout for European corn borer infestations.**

Washington, D.C. : National Agricultural Aviation Association. Agricultural aviation. June 1987. v. 14 (4). p. 20-21. (NAL Call No.: DNAL S494.5.A3W3).

0711

***Macrocentrus gifuensis* Ashmead a polyembryonic braconid parasite in the European corn borer /by H.L. Parker.**

Parker, Harry L. Washington : U.S. Dept. of Agriculture, 1931. Caption title. 63 p., 1 leaf of plates : ill. ; 23 cm. Literature cited: p. 61-62. (NAL Call No.: DNAL 1 Ag84Te no.230).

0712

**Maize chlorotic dwarf virus and its vector in sweet corn.**

AKFRA. Bona, R.L. Dale, J.L.; Mueller, A.J. Fayetteville, Ark. : The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. July/Aug 1985. v. 34 (4). p. 5. (NAL Call No.: DNAL 100 AR42F).

## (PESTS OF PLANTS - INSECTS)

0713

**Maize stalk borer (Lepidoptera: Pyralidae) damage and plant resistance.**

EVETEX. Ampofo, J.K.O. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1124-1129. Includes references. (NAL Call No.: DNAL QL461.E532).

0714

**Maize streak virus: effect of temperature on vector and virus.**

PHYTAJ. Damsteegt, V.D. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Nov 1984. v. 74 (11). p. 1317-1319. Includes 16 references. (NAL Call No.: DNAL 464.8 P56).

0715

**Maize stripe virus.**

Gingery, R.E. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 69-74. ill. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0716

**Major plasma proteins of larvae of the Southwestern corn borer, *Diatraea grandiosella*.**

Lenz, C.J. Venkatesh, K.; Chippendale, G.M. New York, N.Y. : Alan R. Liss, Inc. Archives of insect biochemistry and physiology. Aug 1987. v. 5 (4). p. 271-284. ill. Includes references. (NAL Call No.: DNAL QL495.A7).

0717

**Malathion no longer recommended as grain protectant.**

Kantack, B. Brookings, S.D. : The Department. Field facts : soils, insects, diseases, weeds, crops - South Dakota State University, Cooperative Extension, Plant Science Department. Sept 23, 1987. v. 2 (22). p. 1. (NAL Call No.: DNAL S596.7.F44).

0718

**Management of Lepidoptera on processing sweet corn in western New York.**

JEENAI. Shelton, A.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1658-1661. Includes references. (NAL Call No.: DNAL 421 J822).

0719

**Managing corn rootworm--1986.**

Bergman, M.K. Edwards, C.R. Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. Nov 1985. (49,rev.). 5 p. (NAL Call No.: DNAL SB844.I6P8).

0720

**Managing corn rootworms, 1987.**

Bergman, M.K. Edwards, C.R. West Lafayette : The Service. Publication E - Purdue University, Cooperative Extension Service. In subseries: Field Crop Insects. Sept 1986. (49,rev.). 5 p. (NAL Call No.: DNAL SB844.I6P8).

0721

**Manure piles and feed lots as sources of European corn borer reinfestation /by L.B. Scott.**

Scott, L.B. 1888-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. Caption title.~ "Contribution from Bureau of Entomology.". 15 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.194).

0722

**Mating behavior of the maize weevil, *Sitophilus zeamais* (Coleoptera: Curculionidae).**

AESAAI. Walgenbach, C.A. Burkholder, W.E. College Park, Md. : The Society. Annals of the Entomological Society of America. Sept 1987. v. 80 (5). p. 578-583. ill. Includes references. (NAL Call No.: DNAL 420 EN82).

0723

**Mechanisms of resistance in Zapalote Chico/ corn silks to fall armyworm (Lepidoptera: Noctuidae) larvae.**

JEENAI. Wiseman, B.R. Widstrom, N.W. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1986. v. 79 (5). p. 1390-1393. Includes references. (NAL Call No.: DNAL 421 J822).

0724

**Metabolism of benfuracarb in young cotton, bean, and corn plants.**

JAFCAU. Tanaka, A.K. Umetsu, N.; Fukuto, T.R. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Nov/Dec 1985. v. 33 (6). p. 1049-1055. Includes references. (NAL Call No.: DNAL 381 J8223).

## (PESTS OF PLANTS - INSECTS)

0725

### **Metabolism of isofenphos in southern corn rootworm.**

PCBPB. Hsin, C.Y. Coats, J.R. New York, N.Y. : Academic Press. Pesticide biochemistry and physiology. June 1986. v. 25 (3). p. 336-345. Includes 23 references. (NAL Call No.: DNAL SB951.P49).

0726

### **Methodological approach to identify chemical oviposition stimulants from maize for European corn borer.**

JCECD. Stockel, J. Bar, M.; Boidron, J.N.; Bourgeois, G. New York, N.Y. : Plenum Press. Journal of chemical ecology. Mar 1987. v. 13 (3). p. 557-567. ill. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0727

### **Methods of breeding *Chelonus annulipes* on the Mediterranean flour moth for use against the European corn borer /by William G. Bradley.**

Bradley, W. G. 1892-. Washington, D.C. : U.S. Dept. of Agriculture, 1941. Caption title.~ "Contribution from Bureau of Entomology and Plant Quarantine.". 23 p. : ill., 1 map ; 24 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84C no.616).

0728

### **Migration team tracks night flyers.**

AGREA. Miller, S. Solomon, B. Washington, D.C. : The Administration. Agricultural research - U.S. Department of Agriculture, Agricultural Research Service. Aug 1987. v. 35 (7). p. 6-9. ill. (NAL Call No.: DNAL 1.98 AG84).

0729

### **Mineral-oil treatment of sweet corn for earworm control /by George W. Barber.**

Barber, George W. 1890-1948. Washington, D.C. : U.S. Dept. of Agriculture, 1942. Caption title.~ Supersedes the following processed publications of the U.S. Bureau of Entomology and Plant Quarantine: E-476, The use of oil for earworm control in sweet corn; E-497, The use of oil or oil containing pyrethrins for earworm control in sweet corn; and E-525, The use of oil or oil containing insecticides for earworm control in sweet corn.~ "Contribution from Bureau of Entomology and Plant Quarantine.". 16 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.657).

0730

### **Mineral oils, alone or combined with insecticides, for control of earworms in sweet corn /by G.W. Barber.**

Barber, George W. 1890-1948. Washington : U.S. Dept. of Agriculture, 1944. Cover title. 83 p. : ill. ; 23 cm. Literature cited: p. 82-83. (NAL Call No.: DNAL 1 Ag84Te no.880).

0731

### **Monitoring adult corn flea beetles (Coleoptera: Chrysomelidae) in sweet corn fields with color sticky traps.**

EVETEX. Adams, R.G. Los, L.M. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1986. v. 15 (4). p. 867-873. Includes references. (NAL Call No.: DNAL QL461.E532).

0732

### **Monitoring of the European corn borer (Lepidoptera: Pyralidae) in South Carolina using pheromone traps.**

JEENAI. Durant, J.A. Manley, D.G.; Carde, R.T. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1539-1543. maps. Includes references. (NAL Call No.: DNAL 421 J822).

0733

### **Monitoring populations of corn rootworm beetles (Coleoptera: Chrysomelidae) with a trap baited with cucurbitacins *Diabrotica barberi*.**

JEENAI. Shaw, J.T. Ruesink, W.G.; Briggs, S.P.; Luckmann, W.H. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1984. v. 77 (6). p. 1495-1499. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0734

### **Monitoring Southwestern corn borer, *Diatraea grandiosella* Dyar, with pheromone-baited traps.**

SENTD. Knutson, A.E. Davis, F.M.; Bird, T.G.; Morrison, W.P. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Mar 1987. v. 12 (1). p. 65-71. Includes references. (NAL Call No.: DNAL QL461.S65).

0735

### **The more important insect injuries to Indian corn general introduction to the subject, and discussion of insects injurious to the plant above ground /by S.A. Forbes.**

Forbes, Stephen Alfred, 1844-1930. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1904. Cover title.~ "This

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article contains the introduction and the first division of the Twenty-third Report of the Illinois State Entomologist. The remaining divisions of that report are devoted to the less important and the relatively unimportant corn insects."--P. 331. p. 329-399, 5 leaves of plates : ill. (some col.) ; 23 cm. Bibliography: p. 399. (NAL Call No.: DNAL 100 116S no.95).

**0736**

**Movement of first-instar western corn rootworms (Coleoptera: Chrysomelidae) in soil.**

EVETEX. Strnad, S.P. Bergman, M.K. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1987. v. 16 (4). p. 975-978. Includes references. (NAL Call No.: DNAL QL461.E532).

**0737**

**Movement of stalk borer larvae (Lepidoptera: Noctuidae) from noncrop areas into corn.**

JEENAI. Lasack, P.M. Pedigo, L.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1697-1702. ill. Includes references. (NAL Call No.: DNAL 421 J822).

**0738**

**Multicomponent kairomonal lures for southern and western corn rootworms (Coleoptera: Chrysomelidae: Diabrotica spp.).**

JEENAI. Lampman, R.L. Metcalf, R.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1987. v. 80 (6). p. 1137-1142. Includes references. (NAL Call No.: DNAL 421 J822).

**0739**

**Natural enemies associated with spider mites (Acari: Tetranychidae) infesting corn in the high plains region of Texas.**

JKESA. Pickett, C.H. Gilstrap, F.E. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. July 1986. v. 59 (3). p. 524-536. Includes references. (NAL Call No.: DNAL 420 K13).

**0740**

**Natural parasitism of Heliothis spp. 1 eggs on cotton and corn in the lower gulf coast of Texas.**

SENTD. Segers, J.C. Benedict, J.H.; Treacy, M.F. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Sept 1984. v. 9 (3). p. 245-248. Includes references. (NAL Call No.: DNAL QL461.S65).

**0741**

**Nature and distribution of European corn borer (Lepidoptera: Pyralidae) larval feeding damage to cotton in North Carolina.**

EVETEX. Savinelli, C.E. Bacheler, J.S.; Bradley, J.R. Jr. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1986. v. 15 (2). p. 399-402. Includes references. (NAL Call No.: DNAL QL461.E532).

**0742**

**Nonpreference resistance to European corn borer (Lepidoptera: Pyralidae) in the Mo-2 ECB maize cultivar.**

JKESA. Barry, D. Darrah, L.L. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1988. v. 61 (1). p. 72-75. Includes references. (NAL Call No.: DNAL 420 K13).

**0743**

**Nonrandom spatial distribution of aphid-vectored maize dwarf mosaic.**

PLDRA. Scott, G.E. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1985. v. 69 (10). p. 893-895. Includes references. (NAL Call No.: DNAL 1.9 P69P).

**0744**

**Northern and western corn rootworm (Coleoptera: Chrysomelidae) oviposition in corn as influenced by foxtail populations and tillage systems.**

JEENAI. Johnson, T.B. Turpin, F.T. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 57-60. Includes references. (NAL Call No.: DNAL 421 J822).

**0745**

**Nuclear polyhedrosis virus transmission by infected Heliothis zea (Boddie) (Lepidoptera: Noctuidae) prior to death.**

JESCEP. Ali, M.I. Young, S.Y.; Yearian, W.C. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. Oct 1987. v. 22 (4). p. 289-294. Includes references. (NAL Call No.: DNAL QL461.G4).

**0746**

**Observations on the infestation of corn by fall armyworm (Lepidoptera: Noctuidae) with reference to plant maturity.**

FETMA. Harrison, F.P. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Sept 1984. v. 67 (3). p. 333-335. Includes 1 references. (NAL Call No.: DNAL 420

F662).

0747

**Observations on the structure and coloration of the larval corn-ear worm (*Chloridea obsoleta*), the bud worm (*Chloridea virescens*) and a few other lepidopterous larvae.**

KAEBE. Garman, H. Lexington : The Station. Bulletin - Kentucky. Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. May 1920. (227). p. 53-84. ill., plates. Includes 14 references. (NAL Call No.: DNAL 100 K41 (2)).

0748

**Olfactory and visual response by black cutworm larvae (*Lepidoptera: Noctuidae*) in locating a bait trap.**

EVETEX. Whitford, F. Showers, W.B. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1984. v. 13 (5). p. 1269-1273. Includes references. (NAL Call No.: DNAL QL461.E532).

0749

**Origins of leafhopper vectors of maize pathogens in Mesoamerica.**

Nault, L.R. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 75-82. ill., maps. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0750

***Orius insidiosus* (Say), an important natural enemy of the corn ear worm /by G.W. Barber.**

Barber, George W. 1890-1948. Washington : U.S. Dept. of Agriculture, 1936. Caption title. 24 p. : ill. ; 23 cm. Literature cited: p. 22-24. (NAL Call No.: DNAL 1 Ag84Te no.504).

0751

**Overwintering by *Trichogramma exiguum* in North Carolina.**

EVETEX. Keller, M.A. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 659-661. Includes references. (NAL Call No.: DNAL QL461.E532).

0752

**Oviposition and subsequent infestation of corn by fall armyworm (*Lepidoptera: Noctuidae*).**

FETMA. Harrison, F.P. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Presented at the "Fall Armyworm Symposium," 1985, Hollywood, Florida. Sept 1986. v. 69 (3). p. 588-592. Includes references. (NAL Call No.: DNAL 420 F662).

0753

**Oviposition behavior of *Dalbulus* leafhoppers (*Homoptera: Cicadellidae*).**

AESAAI. Heady, S.E. Madden, L.V.; Nault, L.R. College Park, Md. : The Society. Annals of the Entomological Society of America. Nov 1985. v. 78 (6). p. 723-727. ill. Includes references. (NAL Call No.: DNAL 420 EN82).

0754

**Oviposition by the stalk borer, *Papaipema nebris* (*Lepidoptera: Noctuidae*), on weeds, plant debris, and cover crops in cage tests.**

JEENAI. Levine, E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 65-68. Includes references. (NAL Call No.: DNAL 421 J822).

0755

**Oviposition preference of *Hydraecia immanis* (*Lepidoptera: Noctuidae*) in cage tests.**

JEENAI. Levine, E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1544-1547. Includes references. (NAL Call No.: DNAL 421 J822).

0756

**Parasites of *Heliothis* spp. (*Lepidoptera: Noctuidae*): parasitism and seasonal occurrence for host crops in the Texas Rolling plains.**

EVETEX. Puterka, G.J. Slosser, J.E.; Price, J.R. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1985. v. 14 (4). p. 441-446. Includes references. (NAL Call No.: DNAL QL461.E532).

0757

**Parasitism of European corn borer by *Lydella thompsoni* (*Diptera: Tachinidae*) and *Macrocentrus grandii* (*Hymenoptera: Pyralidae*) in southeast Pennsylvania and Delaware.**

ETMNA6. Romig, R.F. Mason, C.E.; Burbutis, P.P. Philadelphia, Pa. : American Entomological Society. Entomological news. May/June 1985. v. 96 (3). p. 121-128. maps. Includes references. (NAL Call No.: DNAL 421 EN88).

## (PESTS OF PLANTS - INSECTS)

0758

**Perezia pyraustae in European corn borer populations in North Dakota.**

NDFRA. Frye, R.D. Fargo, N.D. : The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. July/Aug 1973. v. 30 (6). p. 20-22. maps. Includes references. (NAL Call No.: DNAL 100 N813B).

0759

**Performance of maize inbred line B86 in hybrid combinations: resistance to first- and second-generation European corn borers (Lepidoptera: Pyralidae).**

JEENAI. Guthrie, W.D. Russell, W.A.; Jarvis, J.L.; Robbins, J.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 93-95. Includes references. (NAL Call No.: DNAL 421 J822).

0760

**Phaeogenes nigridens Wesmael, an important ichneumonid parasite of the pupa of the European corn borer /by H.D. Smith.**

Smith, H. D. 1894-. Washington : U.S. Dept. of Agriculture, 1932. Caption title.~ Errata Inserted. 46 p. : ill. ; 23 cm. Literature cited: p. 44-45. (NAL Call No.: DNAL 1 Ag84Te no.331).

0761

**Phenology of adult European corn borer (Lepidoptera: Pyralidae) in Virginia (Ostrinia nubilalis).**

Despins, J.L. Roberts, J.R. Sr. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 588-590. Includes references. (NAL Call No.: 421 J822).

0762

**Phenology of field populations of corn rootworms (Coleoptera: Chrysomelidae) relative to calendar date and heat units.**

EVETEX. Bergman, M.K. Turpin, F.T. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1986. v. 15 (1). p. 109-112. Includes references. (NAL Call No.: DNAL QL461.E532).

0763

**The pink corn-worm an insect destructive to corn in the crib /by R.H. Chittenden.**

Chittenden, F. H. 1858-1929. Washington, D.C. : U.S. Dept. of Agriculture, 1916. Caption title.~ "May 8, 1916."~ "Professional paper." 20 p., 4 p. of plates : ill., 1 map ; 24 cm.

Bibliography: p. 19-20. (NAL Call No.: DNAL 1 Ag84B no.363).

0764

**Plant community diversity, herbivore movement, and an insect-transmitted disease of maize.**

ECOLA. Power, A.G. Tempe, Ariz : Ecological Society of America. Ecology : a publication of the Ecological Society of America. Dec 1987. v. 68 (6). p. 1658-1669. Includes references. (NAL Call No.: DNAL 410 EC7).

0765

**Plant resistance and nuclear polyhedrosis virus for suppression of the fall armyworm (Lepidoptera: Noctuidae).**

FETMA. Hamm, J.U. Wiseman, B.R. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Presented at the "Fall Armyworm Symposium," 1985, Hollywood, Florida. Sept 1986. v. 69 (3). p. 541-549. Includes references. (NAL Call No.: DNAL 420 F662).

0766

**Plowing as a control measure for the European corn borer in western New York /by H.N. Bartley and L.B. Scott.**

Bartley, H. N. 1892-. Scott, L. B. 1888-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. Caption title. 28 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.165).

0767

**Pollination interference in seed corn from silk feeding by Colaspis louisianae Blake (Coleoptera:Chrysomelidae).**

Flynn, J.L. Reagan, T.E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1984. v. 77 (5). p. 1185-1188. ill. Includes 12 references. (NAL Call No.: 421 J822).

0768

**Population density and sex ratio dynamics of overwintering maize weevils (Coleoptera: Curculionidae) infesting field corn.**

JESCEP. Dix, D.E. All, J.N. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. Oct 1986. v. 21 (4). p. 368-375. maps. Includes references. (NAL Call No.: DNAL QL461.G4).

0769

**Population dynamics of the fall armyworm (Lepidoptera: Noctuidae) and its larval parasites on whorl stage corn in pheromone-permeated field environments.**  
 EVETEX. Mitchell, E.R. Waddill, V.H.; Ashley, T.R. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1984. v. 13 (6). p. 1618-1623. Includes references. (NAL Call No.: DNAL QL461.E532).

0770

**Population suppression of black cutworm (Lepidoptera: Noctuidae) larvae with seed treatments.**  
 JEENAI. Berry, E.C. Knake, R.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1987. v. 80 (4). p. 921-924. Includes references. (NAL Call No.: DNAL 421 J822).

0771

**Potential of Bonnetia compta (Diptera: Tachinidae) in combination with a nuclear polyhedrosis virus to control Agrotis ipsilon (Lepidoptera: Noctuidae) larvae on corn.**  
 EVETEX. Cossentine, J.E. Lewis, L.C. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1986. v. 15 (2). p. 360-364. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

0772

**Potential yield reductions in maize associated with an anthracnose/European corn borer pest complex in New York.**  
 PHYTAJ. Keller, N.P. Bergstrom, G.C.; Carruthers, R.I. St. Paul, Minn. : American Phytopathological Society. Phytopathology. June 1986. v. 76 (6). p. 586-589. Includes 27 references. (NAL Call No.: DNAL 464.8 P56).

0773

**Predator activity and predation in corn agroecosystems.**  
 EVETEX. Brust, G.E. Stinner, B.R.; McCartney, D.A. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1986. v. 15 (5). p. 1017-1021. Includes references. (NAL Call No.: DNAL QL461.E532).

0774

**Predators reduce black cutworm damage in no-tillage corn.**  
 ORRDA. Brust, G.E. McCartney, D.A.; Stinner, B.R. Wooster, Ohio : The Center. Ohio report on research and development in agriculture, home economics, and natural resources - Ohio

Agricultural Research and Development Center. May/June 1985. v. 70 (3). p. 35-36. (NAL Call No.: DNAL 100 OH3S (3)).

0775

**Preferred grain quantity and insect density for maize weevil (Coleoptera: Curculionidae) interaction studies.**  
 JEENAI. Legg, D.E. Barney, R.J.; Tipping, P.W.; Rodriguez, J.G. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1987. v. 80 (2). p. 388-393. Includes references. (NAL Call No.: DNAL 421 J822).

0776

**Preliminary report upon the infestation and general status of the European corn borer in western New York /by H.N. Bartley and L.B. Scott.**  
 Bartley, H. N. 1892-. Scott, L. B. 1888-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. Caption title. - "Contribution from Bureau of Entomology.". 22 p. : charts ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84C no.197).

0777

**Prey requirements and developmental times of three phytoseiid species predaceous on spider mites.**  
 SENTD. Friese, D.D. Gilstrap, F.E. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. June 1985. v. 10 (2). p. 83-88. Includes references. (NAL Call No.: DNAL QL461.S65).

0778

**Proceedings International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 /edited by D.T. Gordon ... et al. .**  
 --.  
 Gordon, Donald Theile, 1935-. Wooster : Ohio Agricultural Research and Development Center, 1983. x, 261 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SB608.M2I55 1982).

0779

**Production of Heliothis zea on corn in northeastern Mexico and the Lower Rio Grande Valley of Texas: a potential source for corn and cotton infestation on the high plains of Texas.**  
 BCOPB. Raulston, J.R. Pair, S.D.; Sparks, A.N.; Westbrook, J.K.; Loera, J.; Summy, K.R.; Rummel, D.R. Memphis, Tenn. : National Cotton Council and The Cotton Foundation. Proceedings - Beltwide Cotton Production Research

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Conferences. Paper presented at the "Beltwide Cotton Production Research Conferences," January 4-9, 1986, Las Vegas, Nevada. 1986. p. 222-225. maps. Includes 8 references. (NAL Call No.: DNAL SB249.N6).

**0780**

### **Profitable control of underground corn insects /prepared by H.B. Petty and Stevenson Moore III.**

Petty, H. B. Moore, Stevenson. Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics : in cooperation with the Illinois Natural History Survey, 1959. Cover title. 8 p. : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.805).

**0781**

### **A progress report on the investigations of the European corn borer /by D.J. Caffrey and L.H. Worthley.**

Caffrey, D. J. Worthley, L. H. Washington, D.C. : U.S. Dept. of Agriculture, 1927. Caption title. ~ "February, 1927.". 155 p. : ill., maps ; 23 cm. Bibliography: p. 143-146. (NAL Call No.: DNAL 1 Ag84B no.1476).

**0782**

### **Quantification of southwestern corn borer feeding and its impact on corn yield.**

SENTD. Whitworth, R.J. Poston, F.L.; Welch, S.M.; Calvin, D. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Sept 1984. v. 9 (3). p. 308-318. Includes references. (NAL Call No.: DNAL QL461.S65).

**0783**

### **Rate of European corn borer (Lepidoptera: Pyralidae) egg-mass detrition in field corn.**

EVETEX. Calvin, D.D. Knapp, M.C.; Kuang, X.Q.; Poston, F.L.; Welch, S.M. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1986. v. 15 (4). p. 817-820. Includes references. (NAL Call No.: DNAL QL461.E532).

**0784**

### **Reaction of a resistant and a susceptible corn hybrid to various southwestern corn borer infestation levels.**

AGJOAT. William, W.P. Davis, F.M. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1984. v. 76 (5). p. 855-856. Includes 8 references. (NAL Call No.: DNAL 4 AM34P).

**0785**

### **Reactions of maize (Zea mays) accessions to maize rayado fino virus.**

PLDRA. Toler, R.W. Skinner, G.; Bockholt, A.J.; Harris, K.F. St. Paul, Minn. : American Phytopathological Society. Plant disease. Jan 1985. v. 69 (1). p. 56-57. Includes 11 references. (NAL Call No.: DNAL 1.9 P69P).

**0786**

### **Recent Illinois work on the corn root-aphis and the control of its injuries /by Stephen A. Forbes.**

Forbes, Stephen Alfred, 1884-1930. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1915. Cover title. p. 403 -466 : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 100 I16S no.178).

**0787**

### **Recirculating sprayer for control of lepidopterous pests of sweet corn (Heliothis zea, Ostrinia nubilalis, Spodoptera frugiperda).**

Ladd, T.L. Jr. Reichard, D.L.; Lindquist, R.K. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1984. v. 77 (5). p. 1349-1351. ill. Includes 8 references. (NAL Call No.: 421 J822).

**0788**

### **Recurrent selection for resistance to European corn borer in a corn synthetic and correlated effects on agronomic traits.**

CRPSAY. Klenke, J.R. Russell, W.A.; Guthrie, W.D. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 864-868. Includes references. (NAL Call No.: DNAL 64.8 C883).

**0789**

### **Reduction of corn borer numbers from October to June a ten-year study /by J.H. Bigger and H.B. Petty.**

Bigger, J. H. 1898-. Petty, H. B. Urbana, Ill. : University of Illinois Agricultural Experiment Station, in cooperation with Illinois State Natural History Survey, 1953. Cover title. 15 p. : 1 map ; 23 cm. (NAL Call No.: DNAL 100 I16S no.566).

0790

**Regulation of migratory flight by juvenile hormone mimic and inhibitor in the western corn rootworm (Coleoptera: Chrysomelidae).**

AESAAI. Coats, S.A. Mutchmor, J.A.; Tollefson, J.J. College Park, Md. : The Society. Annals of the Entomological Society of America. Sept 1987. v. 80 (5). p. 697-708. Includes references. (NAL Call No.: DNAL 420 EN82).

0791

**Relationship between maysin concentration in corn silk and corn earworm (Lepidoptera:Noctuidae) growth.**

JEENAI. Wiseman, B.R. Widstrom, N.W.; McMillian, W.W.; Waiss, A.C. Jr. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1985. v. 78 (2). p. 423-427. Includes references. (NAL Call No.: DNAL 421 J822).

0792

**Relationships between corn-canopy microenvironments and banks grass mite (Acari: Tetranychidae) abundance.**

EVETEX. Perring, T.M. Holtzer, T.O.; Toole, J.L.; Norman, J.M. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1986. v. 15 (1). p. 79-83. Includes references. (NAL Call No.: DNAL QL461.E532).

0793

**Relative efficiencies of two European corn borer sex pheromone blends in South Carolina.**

DuRant, J.A. Manley, D.G. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Jan 1987. v. 4 (1). p. 82-86. ill. Includes references. (NAL Call No.: DNAL SB599.J69).

0794

**Release of predatory mites (Acari: Phytoseiidae) by aircraft for the biological control of spider mites (Acari: Tetranychidae) infesting corn.**

JEENAI. Pickett, C.H. Gilstrap, F.E.; Morrison, R.K.; Bouse, L.F. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1987. v. 80 (4). p. 906-910. Includes references. (NAL Call No.: DNAL 421 J822).

0795

**Reproductive biology and survival of Diabrotica barberi (Coleoptera: Chrysomelidae): effect of temperature, food, and seasonal time of emergence.**

AESAAI. Naranjo, S.E. Sawyer, A.J. College Park, Md. : The Society. Annals of the Entomological Society of America. Nov 1987. v. 80 (6). p. 841-848. Includes references. (NAL Call No.: DNAL 420 EN82).

0796

**Reproductive incompatibility between host strains of the fall armyworm (Lepidoptera: Noctuidae).**

AESAAI. Pashley, D.P. Martin, J.A. College Park, Md. : The Society. Annals of the Entomological Society of America. Nov 1987. v. 80 (6). p. 731-733. Includes references. (NAL Call No.: DNAL 420 EN82).

0797

**Resistance in corn (Zea mays) to the fall armyworm Spodoptera frugiperda: the impact of public research on commercial seed companies.**

FETMA. Overman, J.L. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. Presented at the "Fall Armyworm Symposium," 1985, Hollywood, Florida. Sept 1986. v. 69 (3). p. 537-541. Includes references. (NAL Call No.: DNAL 420 F662).

0798

**Resistance of dent corn inbred lines to survival of first-generation European corn borer larvae /by L.H. Patch and Ray T. Everly. Patch, L. H. 1896-. Everly, Ray T. 1902-. Washington : U.S. Dept. of Agriculture, 1945. Caption title. 10 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.893).**

0799

**Resistance of sorghum genotypes to leaf feeding by first-generation European corn borer larvae compared with maize genotypes.**

Guthrie, W.D. Dharmalingam, S.; Jarvis, J.L.; Kindler, D.; Atkins, R.E.; Tseng, C.T.; Zhou, D. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Apr 1985. v. 2 (2). p. 175-184. Includes references. (NAL Call No.: DNAL SB599.J69).

## (PESTS OF PLANTS - INSECTS)

0800

**Response of western corn rootworm (Coleoptera: Chrysomelidae) adults to several semiochemicals in cornfields.**

JEENAI. Johnson, T.B. Raemisch, D.R.; Las, A.S.; Turpin, F.T. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 85-88. Includes references. (NAL Call No.: DNAL 421 J822).

0801

**A Review of information on the lesser cornstalk borer, *Elasmopalpus lignosellus* (Zeller) /Hamlin H. Tippins, editor. --.**

Tippins, Hamlin H. Athens, Ga. : University of Georgia, College of Agriculture, Experiment Stations, 1982. Cover title.~ Errata slip inserted. 65 p. ; 28 cm. --. Includes bibliographies. (NAL Call No.: DNAL HD1775.G4G43 no.17).

0802

**Role of arthropods in field contamination.**

SCSBA. McMillian, W.W. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 20-22. (NAL Call No.: DNAL 100 G29S0).

0803

**Role of intercropped red clover in inhibiting European corn borer (Lepidoptera: Pyralidae) damage to corn in eastern Ontario.**

JEENAI. Lambert, J.D.H. Arnason, J.T.; Serratos, A.; Philogene, B.J.R.; Faris, M.A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1987. v. 80 (6). p. 1192-1196. Includes references. (NAL Call No.: DNAL 421 J822).

0804

**Role of selected arthropods in the contamination of corn by *Aspergillus flavus* as measured by aflatoxin production.**

SCSBA. Rodriguez, J.G. Patterson, C.G.; Potts, M.F.; Poneleit, C.G.; Beine, R.L. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 23-26. (NAL Call No.: DNAL 100 G29S0).

0805

**Role of selected corn insects and plant stress in aflatoxin production in Kentucky corn.**

TKASAT. Rodriguez, J.G. Patterson, C.G.; Potts, M.F.; Poneleit, C.G.; Beine, R.L. Louisville, K.Y. : The Academy. Transactions of the Kentucky Academy of Science. Sept 1984. v. 45 (3/4). p. 138-143. Includes 10 references. (NAL Call No.: DNAL 500 K41).

0806

**Role of (Z)- and (E)-11-tetradecenyl acetate pheromone components in the sexual behavior of the (Z) strain of the European corn borer, *Ostrinia nubilalis* (Lepidoptera: Pyralidae).**

Webster, R.P. Carde, R.T. New York, N.Y. : Plenum Press. Journal of chemical ecology. Jan 1984. v. 10 (1). p. 9-15. Includes references. (NAL Call No.: QD415.A1J6).

0807

**The rough-headed corn stalk-beetle /by W.J. Phillips and Henry Fox.**

Phillips, W. J. 1879-. Fox, Henry, 1875-. Washington, D.C. : U.S. Dept. of Agriculture, 1924. Caption title.~ "October 14, 1924.". 34 p., 4 p. of plates : ill., 1 map ; 24 cm. Bibliography: p. 33. (NAL Call No.: DNAL 1 Ag84B no.1267).

0808

**The rough-headed corn stalk-beetle in the southern states and its control /W.J. Phillips and Henry Fox.**

Phillips, W. J. 1879-. Fox, Henry, 1875-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. Originally issued Oct. 1917. 6 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.875 1933).

0809

**The rough-headed corn stalk-beetle in the southern states and its control /W.J. Phillips and Henry Fox.**

Phillips, W. J. 1879-. Fox, Henry, 1875-. Washington, D.C. : U.S. Dept. of Agriculture, 1917. Cover title.~ "Contribution from the Bureau of Entomology.". 12 p. : ill., 1 map ; 23 cm. Bibliography: p. 10-12. (NAL Call No.: DNAL 1 Ag84F no.875).

0810

**Scouting, quarantine, and control for the European corn borer, 1917-26 /by L.H. Worthley and D.J. Caffrey.**

Worthley, L. H. 1877-. Caffrey, D. J. 1886-. Washington : U.S. Dept. of Agriculture, 1927. Cover title. 143 p. : ill. ; 23 cm. Literature

cited: p. 142. (NAL Call No.: DNAL 1 Ag84Te no.53).

0811

**Seasonal abundance of lesser cornstalk borer (Lepidoptera: Pyralidae) adults in soybean, peanut, corn, sorghum, and wheat in northern Florida.**

JESCEP. Funderburk, J.E. Herzog, D.C.; Lynch, R.E. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. Apr 1987. v. 22 (2). p. 159-168. Includes references. (NAL Call No.: DNAL QL461.G4).

0812

**Seasonal oviposition of northern and western corn rootworm (Coleoptera: Chrysomelidae) in continuous cornfields.**

JEENAI. Hein, G.L. Tollefson, J.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1238-1241. Includes references. (NAL Call No.: DNAL 421 J822).

0813

**Seedcorn maggot (Diptera:Anthomyiidae) infestation levels and effects on five crops.**

EVETEX. Hough-Goldstein, J.A. Hess, K.A. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1984. v. 13 (4). p. 962-965. Includes references. (NAL Call No.: DNAL QL461.E532).

0814

**Seedcorn maggots (Diptera: Anthomyiidae) and slugs in conservation tillage systems in Ohio.**

JEENAI. Hammond, R.B. Stinner, B.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1987. v. 80 (3). p. 680-684. Includes references. (NAL Call No.: DNAL 421 J822).

0815

**Selection-induced differences among strains of Iowa stiff stalk synthetic maize.**

CRPSAY. Ojervides-Garcia, M. Hallauer, A.R. Madison, Wis. : Crop Science Society of America. Crop science. May/June 1986. v. 26 (3). p. 506-511. Includes references. (NAL Call No.: DNAL 64.8 C883).

0816

**Semiochemical attractants of *Diabrotica undecimpunctata howardi* Barber, southern corn rootworm, and *Diabrotica virgifera virgifera* Leconte, the western corn rootworm (Coleoptera: Chrysomelidae).**

JCECD. Lampman, R.L. Metcalf, R.L.; Andersen, J.F. New York, N.Y. : Plenum Press. Journal of chemical ecology. Apr 1987. v. 13 (4). p. 959-975. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0817

**Serological and biochemical properties of the capsid and major noncapsid proteins of maize stripe, rice hoja blanca, and Echinochloa hoja blanca viruses.**

PHYTAJ. Falk, B.W. Morales, F.J.; Tsai, J.H.; Niessen, A.I. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1987. v. 77 (2). p. 196-201. 111. Includes references. (NAL Call No.: DNAL 464.8 P56).

0818

**Serological detection and evidence for multiplication of maize mosaic virus in the Planthopper, *Peregrinus maidis*.**

PHYTAJ. Falk, B.W. Tsai, J.H. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1985. v. 75 (7). p. 852-855. Includes 21 references. (NAL Call No.: DNAL 464.8 P56).

0819

**Sex pheromone blend discrimination by male moths from E and Z strains of European corn borer.**

JCECD. Glover, T.J. Tang, X.H.; Roelofs, W.L. New York, N.Y. : Plenum Press. Journal of chemical ecology. Jan 1987. v. 13 (1). p. 143-151. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0820

**Sex pheromone production and perception in European corn borer moths is determined by both autosomal and sex-linked genes.**

PNASA. Roelofs, W. Glover, T.; Tang, X.H.; Sreng, I.; Robbins, P.; Eckenrode, C.; Lofstedt, C.; Hansson, B.S.; Bengtsson, B.O. Washington, D.C. : The Academy. Proceedings of the National Academy of Sciences of the United States of America. Nov 1987. v. 84 (21). p. 7585-7589. Includes references. (NAL Call No.: DNAL 500.N21P).

## (PESTS OF PLANTS - INSECTS)

0821

**Shuck protection for ear corn /by C.H. Kyle.**  
Kyle, C. H. b. 1878. Washington, D.C. : U.S. Dept. of Agriculture, 1918. Caption title.~ "September 18, 1918."~ "Professional paper.". 16 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84B no.708).

0822

**Soil treatment for corn rootworm control.**  
Rodriguez, J.G. Lexington : The Station. Progress report - Kentucky Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, Lexington, Ky. 40546-0091. May 1953. (12). 8 p. (NAL Call No.: DNAL 100 K41PR).

0823

**The southern corn leaf-beetle /by E.O.G. Kelly.**  
Kelly, E. O. G. 1880-. Washington, D.C. : U.S. Dept. of Agriculture, 1915. Caption title.~ "June 16, 1915."~ "Professional paper.". 11 p., 2 p. of plates : 1 map ; 24 cm. Bibliography: p. 11. (NAL Call No.: DNAL 1 Ag84B no.221).

0824

**The southern corn rootworm and farm practices to control it /Philip Luginbill.**  
Luginbill, Philip, 1884-. Washington, D.C. : U.S. Dept. of Agriculture, 1918. Cover title.~ "Contribution from the Bureau of Entomology.". 12 p. : ill., 1 map ; 23 cm. List of publications "relating to insects injurious to cereal and forage crops" p. 11-12. (NAL Call No.: DNAL 1 Ag84F no.950).

0825

**The southern corn rootworm, or budworm /by F.M. Webster.**  
Webster, F. M. 1849-1916. Washington, D.C. : U.S. Dept. of Agriculture, 1913. Caption title.~ "September 27, 1913.". 11 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84B no.5).

0826

**Southern green stink bug damage to field corn.**  
LOAGA. Riley, T.J. Negron, J.; Baldwin, J. Baton Rouge, La. : The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Spring 1987. v. 30 (3). p. 3, 24. (NAL Call No.: DNAL 100 L939).

0827

**Southern green stink bug, *Nezara viridula* (Heteroptera: Pentatomidae), feeding in corn.**  
JEENAI. Negron, J.F. Riley, T.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1987. v. 80 (3). p. 666-669. Includes references. (NAL Call No.: DNAL 421 J822).

0828

**The Southwestern corn borer /by E.G. Davis ... et al. .**  
Davis, E. G. 1901-. Washington : U.S. Dept. of Agriculture, 1933. Cover title. 62 p. : ill., 1 map ; 23 cm. Literature cited: p. 61. (NAL Call No.: DNAL 1 Ag84Te no.388).

0829

**Southwestern corn borer: attractiveness to synthetic pheromone.**  
SENTD. Davis, F.M. Bird, T.G.; Sloderbeck, P.E.; Lewis, B.E.; Yochim, R.S.; Knutson, A.E.; Ng, S.S.; Gallardo, J.L.; Pedroza, A.S.; Mihm, J.A. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Mar 1987. v. 12 (1). p. 57-63. Includes references. (NAL Call No.: DNAL QL461.S65).

0830

**Southwestern corn borer insecticide evaluations, 1985.**  
Behle, R.W. Michels, G.J. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. Includes statistical data. Jan 1986. (4350). 6 p. (NAL Call No.: DNAL 100 T31P).

0831

**Southwestern corn borer larval growth on corn callus and its relationship with leaf feeding resistance.**  
CRPSAY. Williams, W.P. Davis, F.M. Madison, Wis. : Crop Science Society of America. Crop science. Mar/Apr 1985. v. 25 (2). p. 317-319. Includes 11 references. (NAL Call No.: DNAL 64.8 C883).

0832

***Spodoptera frugiperda* (Lepidoptera: Noctuidae): deterrence of oviposition by aqueous homogenates of fall armyworm and corn earworm larvae applied on whorl-stage corn.**  
EVETEX. Gross, H.R. Jr. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1984. v. 13 (6). p. 1498-1501. Includes references. (NAL Call No.: DNAL QL461.E532).

0833

**Spraying and dusting field corn for corn borer control** /by G.C. Decker and J.H. Bigger.  
Decker, G. C. 1898-. Bigger, J. H. 1898-.  
Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1949. Cover title.~ In cooperation with Illinois State Natural History Survey. 8 p. : ill., charts ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.642).

0834

**Stalk lodging in corn: guidelines for preventive management.**  
Nielsen, B. Colville, D. West Lafayette, Ind. : The Service. AY - Purdue University Cooperative Extension Service. Dec 1986. (262). 4 p. (NAL Call No.: DNAL S544.3.I6P82).

0835

**Staphylococcus, paramyxovirus-like, rickettsia-like and other structures in *Peregrinus maidis* (Homoptera, Delphacidae).**  
JIVPA. Ammar, E.D. Nault, L.R.; Styer, W.E.; Saif, Y.M. Duluth, Minn. : Academic Press. Journal of invertebrate pathology. Mar 1987. v. 49 (2). p. 209-217. ill. Includes references. (NAL Call No.: DNAL 421 J826).

0836

**Status of imported parasites of European corn borer** /by D.W. Jones and D.J. Caffrey.  
Jones, D. W. Caffrey, D. J. Washington, D.C. : U.S. Dept. of Agriculture, 1927. Caption title.~ "Contribution from Bureau of Entomology.". 8 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84C no.14).

0837

**Sterilization of adult male western corn rootworms by gamma radiation in an inert atmosphere.**  
JKESA. Branson, T.F. Guss, P.L. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Oct 1984. v. 57 (4). p. 717-719. Includes references. (NAL Call No.: DNAL 420 K13).

0838

**Strains of field corn resistant to the survival of the European corn borer** /by L.H. Patch, J.R. Holbert, and R.T. Everly.  
Patch, L. H. 1896-. Holbert, James R. 1890-; Everly, R. T. 1902-. Washington : U.S. Dept. of Agriculture, 1942. Caption title. 22 p. ; 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.823).

0839

**Strains of the European corn borer in the United States** /by K.D. Arbuthnot.  
Arbuthnot, K. D. 1902-. Washington : U.S. Dept. of Agriculture, 1944. Caption title. 20 p. : ill. ; 23 cm. Literature cited: p. 19-20. (NAL Call No.: DNAL 1 Ag84Te no.869).

0840

**Structure-activity relationships among maytansinoids in their effect on the European corn borer, *Ostrinia nubilalis* (Hubner).**  
JCECD. Madrigal, R.V. Zilkowski, B.W.; Smith, C.R. Jr. New York, N.Y. : Plenum Press. Journal of chemical ecology. Apr 1985. v. 11 (4). p. 501-506. Includes references. (NAL Call No.: DNAL QD415.A1J6).

0841

**Studies of *Exeristes roborator* (Fab.), a parasite of the European corn borer in the Lake Erie area** /by W.A. Baker and L.G. Jones.  
Baker, W. A. 1898-. Jones, L. G. Washington : U.S. Dept. of Agriculture, 1934. Caption title. 27 p., 2 p. of plates : ill. ; 23 cm. Literature cited: p. 25-26. (NAL Call No.: DNAL 1 Ag84Te no.460).

0842

**Studies on germination of seed corn treated to control soil insects** / George E. Gould .  
Gould, George Edward, 1905-. Lafayette, Ind. : Purdue University Agricultural Experiment Station, 1955. Cover title. 12 p. : ill. ; 28 cm. (NAL Call No.: DNAL 100 In2P no.624).

0843

**Studies on the fall army worm in the Gulf Coast district of Texas** /by R.A. Vickery.  
Vickery, R. A. Washington : U.S. Dept. of Agriculture, 1929. Cover title. 64 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.138).

0844

**Studies on the prevalence of the European corn borer in the East North Central States** /by A.M. Vance.  
Vance, Arlo McGrillis, 1899-. Washington, D.C. : U.S. Dept. of Agriculture, 1942. Caption title.~ "Contribution from Bureau of Entomology and Plant Quarantine.". 24 p. : maps ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84C no.649).

## (PESTS OF PLANTS - INSECTS)

0845

**Study of migratory flight in the western corn rootworm (Coleoptera: Chrysomelidae).**  
EVETEX. Coats, S.A. Tollefson, J.U.; Mutchmor, J.A. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 620-625. Includes references. (NAL Call No.: DNAL QL461.E532).

0846

**Subfreezing temperatures lethal to the European corn borer infesting green ears of sweet corn /by C.H. Batchelder and D.D. Questel.**  
Batchelder, C. H. 1891-. Questel, D. D. 1899-. Washington : U.S. Dept. of Agriculture, 1933. Caption title. 14 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.395).

0847

**A survey of corn soil insect pest problems and control practices in Missouri--1973-76.**  
MAERA. Keaster, A.J. Ward, S.S.; Ward, R.H.; Fairchild, M.L.; Jackson, M.A. Columbia : The Station. Special report - University of Missouri - Columbia, Agricultural Experiment Station. Includes statistical data. Jan 1981. (269). 64 p. maps. (NAL Call No.: DNAL 100 M693SP).

0848

**Survival, growth, and development of southwestern corn borer (Lepidoptera: Pyralidae) on resistant and susceptible maize hybrids.**  
JEENAI. Davis, F.M. Williams, W.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 847-850. Includes references. (NAL Call No.: DNAL 421 J822).

0849

**Survival, growth, and reproduction of the fall armyworm (Lepidoptera: Noctuidae) as affected by resistant corn genotypes.**  
JEENAI. Ng, S.S. Davis, F.M.; Williams, W.P. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 967-971. ill. Includes references. (NAL Call No.: DNAL 421 J822).

0850

**The survival of European corn-borer larvae in barns and other storage places /L.B. Scott and L.H. Patch.**  
Scott, L. B. 1888-. Patch, L. H. 1896-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. Caption title. "Contribution from Bureau of Entomology.". 7 p. ; 23 cm. (NAL Call No.:

DNAL 1 Ag84C no.281).

0851

**Survivorship of the European corn borer, Ostrinia nubilalis (Hubner) (Lepidoptera: Pyralidae) in central Illinois.**  
EVETEX. Siegel, J.P. Maddox, J.V.; Ruesink, W.G. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1987. v. 16 (5). p. 1071-1075. Includes references. (NAL Call No.: DNAL QL461.E532).

0852

**Susceptibility of certain strains of field corn in hybrid combinations to damage by corn earworms /by F.F. Dicke and Merle T. Jenkins.**  
Dicke, F. F. 1899-. Jenkins, Merle T. 1895-. Washington : U.S. Dept. of Agriculture, 1945. Caption title. 36 p., 1 leaf of plates : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.898).

0853

**Sweet corn insect pests.**  
MUCBA. Grafius, E. East Lansing, Mich. : The Service. Extension bulletin E - Cooperative Extension Service, Michigan State University. Sept 1984. (967,rev.). 2 p. ill. (NAL Call No.: DNAL 275.29 M58B).

0854

**Synthetic pheromone 10-methyl-2-tridecanone and its use in controlling the southern corn rootworm and related diabroticites.**  
Guss, P.L. Tumlinson, J.H. III; Sonnet, P.E.; McLaughlin, J.R. Washington, D.C. : The Office. Abstract: A pheromonal compound produced by the southern corn rootworm has been identified as 10-methyl-2-tridecanone (10-M-2-T). The synthetic R-enantiomer of 10-M-2-T demonstrates activity toward the southern corn rootworm comparable to its natural counterpart, whereas the synthetic racemic mixture is characterized by approximately half the activity for a given amount. Related diabroticites such as the western spotted cucumber beetle also respond to the synthetic compounds. By attracting adult beetles to field traps, 10-M-2-T is a useful tool for the monitoring and control of these major agricultural pests. United States patent - United States Patent Office. Copies of USDA patents are available for a fee from the Commissioner of Patents and Trademarks, U.S. Patents and Trademarks Office, Washington, D.C. 20231.~ Includes abstract. Oct 2, 1984. (4,474,991). 1 p. Includes 5 references. (NAL Call No.: DNAL NO CALL NO. (PAT)).

0855

**Temperature and humidity effects on ovipositional rates, fecundity, and longevity of adult female banks grass mites (Acari: Tetranychidae).**

AESAAI. Perring, T.M. Holtzer, T.O.; Kalisch, J.A.; Norman, J.M. College Park, Md. : The Society. Annals of the Entomological Society of America. Sept 1984. v. 77 (5). p. 581-586. Includes 21 references. (NAL Call No.: DNAL 420 EN82).

0856

**Temperature and precipitation in relation to the number of generations of European corn borer in the United States /by K.D. Arbuthnot.** Arbuthnot, K. D. 1902-. Washington : U.S. Dept. of Agriculture, 1949. Caption title. 22 p. : ill., maps ; 23 cm. Literature cited: p. 21-22. (NAL Call No.: DNAL 1 Ag84Te no.987).

0857

**Termination of diapause and postdiapause development in eggs of the stalk borer (Lepidoptera: Noctuidae).**

EVETEX. Levine, E. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1986. v. 15 (2). p. 403-408. Includes references. (NAL Call No.: DNAL QL461.E532).

0858

**Tillage and soil insecticide effects on predator-black cutworm (Lepidoptera: Noctuidae) interactions in corn agroecosystems.**

JEENAI. Brust, G.E. Stinner, B.R.; McCartney, D.A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1389-1392. Includes references. (NAL Call No.: DNAL 421 J822).

0859

**Toxicity and pharmacodynamics of avermectin in the tobacco budworm, corn earworm, and fall armyworm (Noctuidae: Lepidoptera).**

JAFAU. Bull, D.L. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Jan/Feb 1986. v. 34 (1). p. 74-78. Includes references. (NAL Call No.: DNAL 381 J8223).

0860

**The transmission of corn stunt spiroplasma by natural and experimental vectors.**

Markham, P.G. Alivizatos, A.S. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio,

August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 56-61. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

0861

**Two fall armyworm strains feed on corn, rice and bermudagrass.**

LDAGA. Pashley, D.P. Sparks, T.C.; Quisenberry, S.S.; Jamjanya, T.; Dowd, P.F. Baton Rouge, La. : The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Spring 1987. v. 30 (3). p. 8-9. (NAL Call No.: DNAL 100 L939).

0862

**Two years before the hatch: rootworms adapt to crop rotation.**

Krysan, J.L. Foster, D.E.; Branson, T.F.; Dstlie, K.R.; Cranshaw, W.S. College Park, Md. : The Society. Bulletin of the Entomological Society of America. Winter 1986. v. 32 (4). p. 250-253. Includes references. (NAL Call No.: DNAL 423.9 EN8).

0863

**The twospotted spider mite: a case history.**

Kennedy, G.G. Margolies, D.C. Baton Rouge, La. : Claitor's Publishing Division, c1985. The movement and dispersal of agriculturally important biotic agents : an International Conference on the Movement and Dispersal of Biotic Agents, held at Baton Rouge, La., Dct 17-19, 1984 / edited by David R. MacKenzie. p. 443-452. Includes references. (NAL Call No.: DNAL SB599.2.I66 1984).

0864

**Use of Elcar to reduce the number of corn earworms (Lepidoptera: Noctuidae) developing in field corn.**

FETMA. Hamm, J.J. Raulston, J.R.; Lorea, J.; Sparks, A.N.; Houghtaling, J.E. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. June 1986. v. 69 (2). p. 383-390. Includes references. (NAL Call No.: DNAL 420 F662).

0865

**Use of farm machinery for corn-borer control in the one-generation area /by R.M. Merrill.**

Merrill, R. M. 1895-. Washington, D.C. : U.S. Dept. of Agriculture, 1934. Caption title. "Contribution from Bureau of Agricultural Engineering". 11 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.321).

## (PESTS OF PLANTS - INSECTS)

0866

Use of radiographs for movement analysis of the corn wireworm, *Melanotus communis* (Coleoptera: Elateridae).  
EVETEX. Villani, M.G. Gould, F. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 462-464. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

0867

Use of the Pherocon AM trap as a scouting tool for predicting damage by corn rootworm (Coleoptera: Chrysomelidae) larvae.  
JEENAI. Hein, G.L. Tollefson, J.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 200-203. Includes references. (NAL Call No.: DNAL 421 J822).

0868

The use of trajectory analysis in projecting the long range migration of the black cutworm (Lepidoptera: Noctuidae) moth into the Midwest.  
Smelser, R.B. Shaw, R.H.; Showers, W.B. Boston : The Society, 1985. 17th Conference on Agricultural and Forest Meteorology and seventh Conference on Biometeorology and Aerobiology, May 21-24, 1985, Scottsdale, Ariz. : preprint volume / sponsored by the American Meteorological Society. Pest of seedling corn in Iowa. p. 288-291. maps. Includes references. (NAL Call No.: DNAL S600.2.C6 1985).

0869

Using a decision model to optimize European corn borer (Lepidoptera: Pyralidae) egg-mass sampling.  
EVETEX. Calvin, D.D. Knapp, M.C.; Xingquan, K.; Poston, F.L.; Welch, S.M. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1212-1219. Includes references. (NAL Call No.: DNAL QL461.E532).

0870

UWEXnote 3: the armyworm.  
Wedberg, J.L. Madison, Wis. : The Research Division. Publication - Cooperative Extension Programs. University of Wisconsin - Extension. July 1985. (A3327). 2 p. ill. (NAL Call No.: DNAL S544.3.W6W53).

0871

Value of adult corn rootworm (Coleoptera: Chrysomelidae) population estimates in pest management decision making.  
JEENAI. Foster, R.E. Tollefson, J.J.; Nyrop, J.P.; Hein, G.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1986. v. 79 (2). p. 303-310. Includes references. (NAL Call No.: DNAL 421 J822).

0872

Varying amounts of bait influences numbers of western and northern corn rootworms (Coleoptera: Chrysomelidae) caught in cucurbitacin traps.  
JEENAI. Fielding, D.J. Ruesink, W.G. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1985. v. 78 (5). p. 1138-1144. Includes references. (NAL Call No.: DNAL 421 J822).

0873

Volatile components of corn roots: possible insect attractants.  
JAFCAU. Buttery, R.G. Ling, L.C. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1985. v. 33 (4). p. 772-774. Includes references. (NAL Call No.: DNAL 381 J8223).

0874

The western corn rootworm.  
Weiss, M.J. Bozeman, Mont. : The Service. Montguide MT : Agriculture - Montana State University. Cooperative Extension Service. Mar 1984. (8409). 2 p. (NAL Call No.: DNAL S544.3.M9M65).

0875

The western corn rootworm.  
Weiss, M.J. Jensen, G. Bozeman, Mont. : The Service. Montguide MT : Agriculture - Montana State University. Cooperative Extension Service. Dec 1985. (8409,rev.). 2 p. (NAL Call No.: DNAL S544.3.M9M65).

0876

The western corn rootworm /by F.M. Webster.  
Webster, F. M. 1849-1916. Washington, D.C. : U.S. Dept. of Agriculture, 1913. Caption title.~ "September 27, 1913.". 8 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84B no.8).

0877

**Western corn rootworm (Coleoptera: Chrysomelidae) beetle counts as ameans of making larval control recommendations in Nebraska.**

JEENAI. Stamm, D.E. Mayo, Z.B.; Campbell, J.B.; Witkowski, J.F.; Andersen, L.W.; Kozub, R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1985. v. 78 (4). p. 794-798. Includes references. (NAL Call No.: DNAL 421 J822).

0878

**White grub control trial in corn - 1987.**

NDFRA. McBride, D.K. Fargo, N.D. : The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Jan/Feb 1988. v. 45 (4). p. 25-26. Includes references. (NAL Call No.: DNAL 100 N813B).

0879

**White grubs (Coleoptera: Scarabaeidae: Phyllophaga spp.) attacking corn in southeastern North Dakota: adult emergence patterns.**

PNDAAZ. McLeod, M.J. Schulz, J.T. Grand Forks, N.D. : The Academy. Proceedings of the North Dakota Academy of Science. Apr 1986. v. 40. p. 119. Includes references. (NAL Call No.: DNAL 500 N813).

0880

**Wireworm control trials in corn.**

NDFRA. McBride, D.K. Fargo, N.D. : The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. May/June 1983. v. 40 (6). p. 10-13. ill. Includes references. (NAL Call No.: DNAL 100 N813B).

0881

**Within- and among-field distribution of second-flight European corn borer (Lepidoptera: Pyralidae) moths in corn.**

EVETEX. Legg, D.E. Chiang, H.C. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1985. v. 14 (6). p. 834-841. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

0882

**Within-plant and within-field distribution of first-generation European corn borer (Lepidoptera: Pyralidae) egg masses on field corn in Virginia.**

EVETEX. Despina, J.L. Roberts, J.E. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1986. v. 15 (1). p. 106-108. Includes references. (NAL Call No.:

DNAL QL461.E532).

0883

**Yield losses from second-generation European corn borers (Lepidoptera: Pyralidae) in long-season maize hybrids planted early compared with short-season hybrids planted late.**

JEENAI. Jarvis, J.L. Guthrie, W.D.; Robbins, J.C. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1986. v. 79 (1). p. 243-246. Includes references. (NAL Call No.: DNAL 421 J822).

0884

**Yield losses to field corn from foliar feeding by fall armyworm (Lepidoptera: Noctuidae).**

JESCEP. Harrison, F.P. Harrison, T.S. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. July 1987. v. 22 (3). p. 270-274. Includes references. (NAL Call No.: DNAL QL461.G4).

0885

**1980 pesticide use on field corn in the Lake States /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, United States Department of Agriculture, 1982. "January 1982.". iii, 23 p. : map ; 28 cm. --. Bibliography: p. 19. (NAL Call No.: DNAL aSB950.2.A14N52).

0886

**1980 pesticide use on field corn in the major producing states /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, U.S. Dept. of Agriculture, 1982. "February 1982.". iii, 33 p. : map ; 28 cm. --. Bibliography: p. 28. (NAL Call No.: DNAL aSB191.M2N3).

0887

**1983 virus tolerance ratings of maize genotypes grown in Missouri.**

Wallin, J.R. Darrah, L.L. Beltsville, Md. : The Service. ARS - United States Department of Agriculture, Agricultural Research Service. Sept 1985. (34). 8 p. (NAL Call No.: DNAL aS21.R44A7).

**(PESTS OF PLANTS - INSECTS)**

**0888**

**1988 corn pest management. Weed, insect, disease & nematode control recommendations.**  
Everest, J.W. Patterson, M.G.; Mask, P.; Cobb, P.P.; Hagan, A. Auburn, Ala. : The Service. Circular ANR - Cooperative Extension Service, Auburn University. In subseries: Integrated Pest Management. Dec 1987. (428). 11 p. (NAL Call No.: DNAL S544.3.A2C47).

# PESTS OF PLANTS - NEMATODES

0889

## **Agricultural pests as common property: control of the corn rootworm.**

Lazarus, W.F. Dixon, B.L. Ames, Iowa : American Agricultural Economics Association. Extract: Insecticide resistance is an increasingly widespread problem reducing effectiveness and necessitating a switch to more expensive controls. A common property resource model is used to describe potential gain from internalizing resistance externalities through regional coordination. A nonlinear programming model of an Illinois cash grain farm is used to estimate the gain for corn rootworm control where rotation to soybeans is an alternative to insecticide. Switching to rotation as resistance builds causes a relatively minor decrease in profits because soybeans are profitable. Gain from delaying resistance is slight. Co-states give price changes necessary to alter externality production. American journal of agricultural economics. Includes statistical data. Nov 1984. v. 66 (4). p. 456-465. Includes 10 references. (NAL Call No.: DNAL 280.8 J822).

0890

**Applying the economic threshold concept to control lesion nematodes on corn** Craig Osteen, A.W. Johnson, Clyde C. Dowler. -. Osteen, Craig D. Washington, D.C. U.S. Dept. of Agriculture, Economic Research Service 1982. iv, 31 p. : ill. --. Bibliography: p. 29-31. (NAL Call No.: Fiche S-69 no. 1670).

0891

## **Corn growth and yield response to ethylene dibromide and nitrogen.**

AGJDAT. Touchton, J.T. Rodriguez-Kabana, R. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1985. v. 77 (3). p. 389-392. Includes 22 references. (NAL Call No.: DNAL 4 AM34P).

0892

## **Corn nematodes.**

MacDonald, D.H. Stienstra, W.C. St. Paul : University of Minnesota, Office of Special Programs, 1983. Soils, Fertilizer and Agricultural Pesticides Short Course : proceedings : December 13-14, 1983 / presented by the University of Minnesota Institute of Agriculture, Forestry and Home Economics ... et al. . p. 55-60. Includes references. (NAL Call No.: DNAL S631.3.S65 1983).

0893

## **Corn response to subsoiling and nematicide application.**

JONEB. Rich, J.R. Johnson, J.T.; Hodge, C.H. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Oct 1985. v. 17 (4). p. 404-407. Includes 14 references. (NAL Call No.: DNAL QL391.N4J62).

0894

## **Cropping effects of marigolds, corn, and okra on population levels on *Meloidogyne javanica* and on carrot yields.**

JONEB. Huang, S.P. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Oct 1984. v. 16 (4). p. 396-398. Includes 11 references. (NAL Call No.: DNAL QL391.N4J62).

0895

## **Description of males of *Heterodera zeae*.**

JONEB. Hutzell, P.A. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Jan 1984. v. 16 (1). p. 83-86. ill. Includes 13 references. (NAL Call No.: DNAL QL391.N4J62).

0896

## **Descriptions of two new species of *Tylenchorhynchus* Cobb, 1913 (Nematoda: Tylenchida), with details on morphology and variation of *T. claytoni*.**

JONEB. Golden, A.M. Maqbool, M.A.; Handoo, Z.A. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Jan 1987. v. 19 (1). p. 58-68. ill. Includes references. (NAL Call No.: DNAL QL391.N4J62).

0897

## **Distribution of field corn roots and parasitic nematodes in subsoiled and nonsubsoiled soil.**

JONEB. Rich, J.R. Hodge, C.; Robertson, W.K. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Apr 1986. v. 18 (2). p. 203-207. Includes references. (NAL Call No.: DNAL QL391.N4J62).

0898

## **Economic analyses of monocultured and maize-rotated soybean crops grown on southern root-knot nematode infested soil.**

Kinloch, R.A. Hewitt, T.D. S.I. : The Society. Proceedings - Soil and Crop Science Society of Florida. 1984. v. 43. p. 172-174. Includes references. (NAL Call No.: DNAL 56.9 S032).

## (PESTS OF PLANTS - NEMATODES)

0899

**Economic thresholds under uncertainty with application to corn nematode management.**  
Moffitt, I.J. Hall, D.C.; Osteen, C.D.  
Experiment, Ga. : The Association. Extract: An economic threshold of agricultural pest management is derived. Results provide a method for researchers to use in making improved pest control recommendations to farmers without farm level decisionmaking. An empirical illustration for lesion nematode management in irrigated corn is given and directions for further research are indicated. Southern journal of agricultural economics - Southern Agricultural Economics Association. Includes statistical data. Dec 1984. v. 16 (2). p. 151-157. Includes 15 references. (NAL Call No.: DNAL AGE HD101.S6).

0900

**Effect of soil temperature on reproduction of Meloidogyne chitwoodi and M. hapla alone and in combination on potato and M. chitwoodi on rotation plants.**  
JONEB. O'Bannon, J.H. Santo, G.S. Raleigh, N.C.  
: Society of Nematologists. Journal of nematology. July 1984. v. 16 (3). p. 309-312. Includes 10 references. (NAL Call No.: DNAL QL391.N4J62).

0901

**The European corn borer in Indiana / G.A. Ficht .**  
Ficht, G. A. 1900-1941. Lafayette, Ind. : Purdue University Agricultural Experiment Station, 1936. Cover title. 24 p. : ill., 1 map ; 24 cm. (NAL Call No.: DNAL 100 In2P no.406).

0902

**Evaluation of nematicides for control of lesion nematodes on corn, 1984.**  
FNETD. Todd, T.C. Amburgey, V.A. s.l. : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1985. v. 40. p. 96. (NAL Call No.: DNAL 464.9 AM31R).

0903

**Evaluation of nematicides for control of plant parasitic nematodes on two cultivars of corn, 1984.**  
FNETD. Phipps, P.M. Elliott, A.P. s.l. : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1985. v. 40. p. 97. (NAL Call No.: DNAL 464.9 AM31R).

0904

**Evaluation of nematicides for nematode control and yield response of field corn, 1985.**  
FNETD. Johnson, A.W. Wright, W.C. s.l. : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1986. v. 41. p. 74-75. (NAL Call No.: DNAL 464.9 AM31R).

0905

**Evaluation of soil nematicides for nematode control, growth and yield increase of field corn, 1984.**  
FNETD. Johnson, A.W. Wright, W.C. s.l. : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1985. v. 40. p. 95. (NAL Call No.: DNAL 464.9 AM31R).

0906

**Influence of selected maize hybrids on nematode populations under differing edaphic conditions.**  
PLDRA. Thomas, S.H. Norton, D.C. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1986. v. 70 (3). p. 234-237. Includes 18 references. (NAL Call No.: DNAL 1.9 P69P).

0907

**Influence of tillage and crop rotation on soybean yields and cyst nematode population.**  
Thulow, D.L. Edwards, J.H.; Gazaway, W.; Eason, J.T. Athens, Ga. : Agricultural Experiment Stations, University of Georgia, 1985? . Proceedings of the 1985 Southern Region No-Till Conference : July 16-17, 1985, Griffin, Georgia / edited by W.L. Hargrove and F.C. Boswell and G.W. Langdale. p. 45-49. Includes 4 references. (NAL Call No.: DNAL S604.S6 1985).

0908

**Influence of tillage methods on Pratylenchus spp. in two soil types.**  
PLDRA. Bergeson, G.B. Ferris, J.M. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1986. v. 70 (4). p. 326-328. Includes 12 references. (NAL Call No.: DNAL 1.9 P69P).

0909

**Integrated pest management strategies for approximately optimal control of corn rootworm and soybean cyst nematode.**  
Zacharias, T.P. Grube, A.H. Ames, Iowa : American Agricultural Economics Association. American journal of agricultural economics. Aug 1986. v. 68 (3). p. 704-715. Includes references. (NAL Call No.: DNAL 280.8 J822).

0910

**Longidorus breviannulatus as a vector for brome mosaic virus.**

JONEB. Huff, D.E. Davis, R.F.; Myers, R.F. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Jan 1987. v. 19 (1). p. 143-145. Includes references. (NAL Call No.: DNAL QL391.N4J62).

0911

**Management of root-knot nematodes by phenamiphos applied through an irrigation simulator with various amounts of water.**

JONEB. Johnson, A.W. Young, J.R.; Wright, W.C. Raleigh, N.C. : Society of Nematologists. Journal of nematology. July 1986. v. 18 (3). p. 364-369. Includes 13 references. (NAL Call No.: DNAL QL391.N4J62).

0912

**Nematode control related to fusarium wilt in soybean and root rot and zinc deficiency in corn.**

JONEB. Minton, N.A. Parker, M.B.; Sumner, D.R. Raleigh, N.C. : Society of Nematologists. Journal of nematology. July 1985. v. 17 (3). p. 314-321. Includes 26 references. (NAL Call No.: DNAL QL391.N4J62).

0913

**Pathogenic effects of *Pratylenchus scribneri* in maize inbreds and related cultivars.**

PLDRA. Waudo, S.W. Norton, D.C. St. Paul, Minn. : American Phytopathological Society. Plant disease. July 1986. v. 70 (7). p. 636-638. Includes 14 references. (NAL Call No.: DNAL 1.9 P69P).

0914

**Pathogenicity and reproduction of *Pratylenchus agilis* in field microplots of soybeans, corn, tomato, or corn-soybean cropping systems.**

PLDRA. Rebois, R.V. Golden, A.M. St. Paul, Minn. : American Phytopathological Society. Plant disease. Nov 1985. v. 69 (11). p. 927-929. 111. Includes 12 references. (NAL Call No.: DNAL 1.9 P69P).

0915

**Plant pathology fact sheet: Corn nematode control.**

Crawford, J.L. Athens, Ga. : The Service. Leaflet - Cooperative Extension Service, University of Georgia. Jan 1986. (249,rev). 4 p. 111. (NAL Call No.: DNAL 275.29 G29L).

0916

**Population dynamics, root penetration, and feeding behavior of *Pratylenchus agilis* in monoxenic root cultures of corn, tomato, and soybean.**

JONEB. Rebois, R.V. Huettel, R.N. Raleigh, N.C. : Society of Nematologists. Journal of nematology. July 1986. v. 18 (3). p. 392-397. Includes 14 references. (NAL Call No.: DNAL QL391.N4J62).

0917

**Reaction of sorghum cultivars and other cover crops to two races of *Meloidogyne incognita*.**

McSorley, R. Lamberts, M.L.; Parrado, J.L.; Reynolds, J.S. S.I. : The Society. Proceedings - Soil and Crop Science Society of Florida. 1987. v. 46. p. 141-143. Includes references. (NAL Call No.: DNAL 56.9 S032).

0918

**Response of corn to nematocidal treatments, 1985.**

FNETD. Phipps, P.M. S.I. : The Society. Fungicide and nematocidal tests : results - American Phytopathological Society. 1986. v. 41. p. 75-76. (NAL Call No.: DNAL 464.9 AM31R).

0919

**Single and combined effects of the lesion nematode and *Colletotrichum graminicola* on growth and anthracnose leaf blight of corn.**

PHYTAJ. Nicholson, R.L. Bergeson, G.B.; DeGennaro, F.P.; Viveiros, D.M. St. Paul, Minn. : American Phytopathological Society. Phytopathology. June 1985. v. 75 (6). p. 654-661. Includes 30 references. (NAL Call No.: DNAL 464.8 P56).

0920

**Soybean and maize cropping models for the management of *Meloidogyne incognita* in the coastal plain.**

JONEB. Kinloch, R.A. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Oct 1986. v. 18 (4). p. 451-458. Includes references. (NAL Call No.: DNAL QL391.N4J62).

0921

**Sting nematode control in corn in southwest Kansas, 1984.**

FNETD. Todd, T.C. Amburgey, V.A. S.I. : The Society. Fungicide and nematocidal tests : results - American Phytopathological Society. 1985. v. 40. p. 96. (NAL Call No.: DNAL 464.9 AM31R).

(PESTS OF PLANTS - NEMATODES)

0922

Studies on lesion nematodes and corn rootworms  
on corn /James D. Smolik. --.

Smolik, James D. Beltsville, Md. :  
Agricultural Research Service, U.S. Dept. of  
Agriculture , 1984. Cover title.~ "Mimeo  
Report. Specific cooperative agreement no.  
1-58-519B-O-0901, Agricultural Research  
Service, U.S. Department of Agriculture and the  
South Dakota Agricultural Experiment Station.  
National Agricul. 2 , 19, 2 leaves ; 28 cm.  
Bibliography: leaf 18. (NAL Call No.: DNAL  
aSB608.M2S6).

# PLANT DISEASES - GENERAL

0923

**Combating corn diseases in Illinois /by Benjamin Koehler and James R. Holbert.**  
Koehler, Benjamin, 1890-. Holbert, James R., 1890-. Urbana, Ill. : University of Illinois College of Agriculture, Agricultural Experiment Station and Extension Service in Agriculture and Home Economics, 1938. In cooperation with Division of Cereal Crops and Diseases, Bureau of Plant Industry, U.S. Department of Agriculture. 35 p., 1 leaf of plates : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.484).

0924

**Control of corn diseases in Illinois /by Benjamin Koehler and James R. Holbert.**  
Koehler, Benjamin, 1890-. Holbert, James R., 1890-. Urbana, Ill. : University of Illinois College of Agriculture and Agricultural Experiment Station, 1931. "In cooperation with Office of Cereal Crops and Diseases, Bureau of Plant Industry, U.S. Department of Agriculture." 27 p., 1 p. of plates : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.364).

0925

**Corn belt status report.**  
Houston, Tex.? : Aircraft Program Operations, Science Missions and Operations Dept., Lockheed Electronics Company, 1971-. "Earth Observations Aircraft Program" -- cover.~ Each vol. has different phases and missions.~ "NASA contract NAS 9-10950."~ "LEC/HASD no. TWP-71-22."~ "LEC job order 67-2956-7025." v. : ill. (some folded), maps (some folded) ; 28 cm. (NAL Call No.: DNAL S494.5.R4C62).

0926

**Corn diseases in Illinois /by Benjamin Koehler and James R. Holbert.**  
Koehler, Benjamin, 1890-. Holbert, James R., 1890-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1930. "In cooperation with Office of Cereal Crops and Diseases, Bureau of Plant Industry, U.S. Department of Agriculture." --cover.~ Includes index. 164 p. : ill. (some col.), maps ; 23 cm. Bibliography: p. 155-159. (NAL Call No.: DNAL 100 I16S no.354).

0927

**Corn diseases in the United States and their control / by A. J. Ullstrup .**  
Ullstrup, A. J. 1907-. Washington, D.C. : Agricultural Research Service, U.S. Dept. of Agriculture in cooperation with Purdue University Experiment Station, 1961. Cover title. 29 p., 9 p. of plates : ill. (some col.) ; 24 cm. (NAL Call No.: DNAL 1 Ag84Ah no.199).

0928

**Corn diseases in the United States and their control A.J. Ullstrup. --.**  
Ullstrup, A. J., 1907-. Washington, D.C. : Agricultural Research Service, U.S. Dept. of Agriculture in cooperation with the Purdue University Agricultural Experiment Station, 1978. 55 p. : ill. --. (NAL Call No.: DNAL Fiche S-85 no.199 1978).

0929

**Corn leafhopper: the making of an insect pest.**  
ORRDA. Nault, L.R. Wooster, Ohio : The Center. Ohio report on research and development in agriculture, home economics, and natural resources - Ohio Agricultural Research and Development Center. Sept/Oct 1984. v. 69 (5). p. 77-78. ill. (NAL Call No.: DNAL 100 OH3S (3)).

0930

**Diseases of corn in the Midwest / prepared by M.C. Shurtleff ... et al. .**  
Shurtleff, Malcolm C. Urbana, Ill. : University of Illinois, College of Agriculture, Cooperative Extension Service, 1967. "Agricultural extension services of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin, and U.S. Department of Agriculture, cooperating."~ "May, 1967." 24 p. : ill. (some col.) ; 28 cm. (NAL Call No.: DNAL 275.29 I162C no.967).

0931

**Diseases of dent corn in the United States /by Arnold J. Ullstrup.**  
Ullstrup, A. J. 1907-. Washington, D.C. : U.S. Dept. of Agriculture, 1943. Caption title. 34 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84C no.674).

0932

**Dry rot of corn /by T.J. Burrill and J.T. Barrett.**  
Burrill, Thomas Jonathan, 1839-1916. Barrett, James T., 1876-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1908. Caption title. 3 p. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.117).

0933

**Proceedings International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 /edited by D.T. Gordon ... et al. .**  
--.  
Gordon, Donald Theile, 1935-. Wooster : Ohio Agricultural Research and Development Center,

## **(PLANT DISEASES - GENERAL)**

1983. x, 261 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SB608.M2I55 1982).

**0934**

### **Registration of ND257 and ND258 parental lines of maize.**

CRPSAY. Cross, H.Z. Madison, Wis. : Crop Science Society of America. Crop science. Jan/Feb 1986. v. 26 (1). p. 215. Includes 2 references. (NAL Call No.: DNAL 64.8 C883).

**0935**

### **Returns to corn pest management practices Michael Hanthorn, Michael Duffy. --.**

Hanthorn, Michael. Washington, D.C. : U.S. Dept. of Agriculture, Economic Research Service, 1983. iv, 13 p. : ill. --. Bibliography: p. 13. (NAL Call No.: DNAL Fiche S-81 no.501).

**0936**

### **Selecting corn hybrids.**

Carter, P.R. Madison, Wis. : The Programs. Publication - Cooperative Extension Programs. University of Wisconsin - Extension. June 1984. (3265). 6 p. maps. (NAL Call No.: DNAL S544.3.W6W53).

**0937**

### **Selection of disease-free seed corn / George N. Hoffer, J.R. Holbert .**

Hoffer, G. N. 1887-. Holbert, James R. 1890-. Lafayette, Ind. : Purdue University Agricultural Experiment Station, 1918. Cover title. 16 p. : ill. ; 23 cm. (NAL Call No.: DNAL 100 In2P no.224).

# PLANT DISEASES - FUNGAL

0938

**Ability of fungal isolates from maize and sorghum to infect roots and reduce seedling emergence of two maize hybrids.**

PLDRA. Chambers, K.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Aug 1987. v. 71 (8). p. 736-739. Includes references. (NAL Call No.: DNAL 1.9 P69P).

0939

**Accelerated development of the European corn borer, *Ostrinia nubilalis* (Lepidoptera: Pyralidae), induced by interactions with *Colletotrichum graminicola* (Melanconiales: Melanconiaceae), the causal fungus of maize anthracnose.**

AESAAI. Carruthers, R.I. Bergstrom, G.C.; Haynes, P.A. College Park, Md. : The Society. Annals of the Entomological Society of America. May 1986. v. 79 (3). p. 385-389. ill. Includes references. (NAL Call No.: DNAL 420 EN82).

0940

**Aflatoxin contamination of corn hybrids in Alabama.**

CECHAF. Davis, N.D. Currier, C.G.; Diener, U.L. St. Paul, Minn. : American Association of Cereal Chemists. Cereal chemistry. Nov/Dec 1986. v. 63 (6). p. 467-470. Includes references. (NAL Call No.: DNAL 59.8 C33).

0941

**Aflatoxin contamination of preharvest corn in Georgia: a six-year study of insect damage and visible *Aspergillus flavus*.**

JEVQAA. McMillian, W.W. Wilson, D.M.; Widstrom, N.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1985. v. 14 (2). p. 200-202. Includes 10 references. (NAL Call No.: DNAL QH540.J6).

0942

**Aflatoxin formation in preharvest maize ears coinoculated with *Aspergillus flavus* and *Aspergillus niger*.**

MYCOAE. Wicklow, D.T. Horn, B.W.; Shotwell, O.L. Bronx, N.Y. : The New York Botanical Garden. Mycologia. Sept/Oct 1987. v. 79 (5). p. 679-682. Includes references. (NAL Call No.: DNAL 450 M99).

0943

**Aflatoxin production by *Aspergillus flavus* and *Aspergillus parasiticus* on visibly sound rehydrated peanut, corn and soybean seed.**

Wilson, D.M. Bell, D.K. Raleigh : American Peanut Research and Education Society. Peanut science. Jan/June 1984. v. 11 (1). p. 43-45. Includes 13 references. (NAL Call No.: SB351.P3P39).

0944

**Ammonium production in cultures of *Bipolaris maydis* race T: evidence for involvement of asparaginase and NADP- and NAD-glutamate dehydrogenases.**

OJSCA. Bischoff, T.W. Garraway, M.O. Columbus, Ohio : Ohio Academy of Science. Ohio journal of science. Dec 1986. v. 86 (5). p. 186-189. Includes references. (NAL Call No.: DNAL 410 OH3).

0945

**Association of corn stalk rot *Fusarium* spp. and western corn rootworm beetles in Colorado.**

PHYTAJ. Gilbertson, R.L. Brown, W.M. Jr.; Ruppel, E.G.; Capinera, J.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Dec 1986. v. 76 (12). p. 1309-1314. Includes 20 references. (NAL Call No.: DNAL 464.8 P56).

0946

**Basisporium dry rot of corn /by L.W. Durrell.**

Durrell, L. W. 1888-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1925. p. 140-160 : ill., charts, maps ; 22 cm. Bibliography: p. 160. (NAL Call No.: DNAL 100 Io9 no.84).

0947

**The brown-spot of corn with suggestions for its control /W.H. Tisdale.**

Tisdale, W. H. 1892-. Washington, D.C. : U.S. Dept. of Agriculture, 1920. Cover title.~ "Contribution from the Bureau of Plant Industry." 9 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1124).

0948

**Channel formation in phospholipid bilayer membranes by the toxin of *Helminthosporium maydis*, race T.**

JMBB80. Holden, M.J. Colombini, M.; Sze, H. New York, N.Y. : Springer. The Journal of membrane biology. 1985. v. 87 (2). p. 151-157. ill. Includes references. (NAL Call No.: DNAL QH573.J6).

## (PLANT DISEASES - FUNGAL)

0949

**Chemical structure-activity relationships of the inhibition of sterol biosynthesis by N-substituted morpholines in higher plants.**  
PCBPB. Rahier, A. Schmitt, P.; Huss, B.; Benveniste, P.; Pommer, E.H. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Feb 1986. v. 25 (1). p. 112-124. Includes references. (NAL Call No.: DNAL SB951.P49).

0950

**Citreoviridin in standing corn infested by *Eupenicillium ochrosalmoneum*.**  
MYCOAE. Wicklow, D.T. Cole, R.J. Bronx, N.Y. : The New York Botanical Garden. Mycologia. Sept/Oct 1984. v. 76 (5). p. 959-961. Includes 5 references. (NAL Call No.: DNAL 450 M99).

0951

**Classification of sweet corn hybrid reactions to common rust, northern leaf blight, Stewart's wilt, and Goss' wilt and associated yield reductions.**

PHYTAU. Pataky, J.K. Headrick, J.M.; Suparyono. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1988. v. 78 (2). p. 172-178. Includes references. (NAL Call No.: DNAL 464.8 P56).

0952

**A comparison of cytoplasms for reaction to brown spot in maize after flooding.**

BUCKDA. Fleming, A.A. Atlanta, Ga. : Georgia Academy of Science. Georgia journal of science. 1986. v. 44 (3). p. 76-80. Includes references. (NAL Call No.: DNAL Q11.G4).

0953

**Comparison of fungicides for control of sweet corn rust.**

CAGRA. Paulus, A.O. Nelson, J.; Otto, H.W.; Hall, B.J. Berkeley, Calif. : The Station. California agriculture - California Agricultural Experiment Station. May/June 1986. v. 40 (5/6). p. 23. ill. (NAL Call No.: DNAL 100 C12CAG).

0954

**Comparison of near-isogenic maize lines with and without the Ht1 gene for resistance to four foliar pathogens.**

PHYTA. Leath, S. Pedersen, W.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Jan 1986. v. 76 (1). p. 108-111. Includes 23 references. (NAL Call No.: DNAL 464.8 P56).

0955

**Comparison of three methods for sampling Northern corn rootworm (*Coleoptera:Chrysomelidae*) adult populations in two Quebec cornfields (*Diabrotica longicornis barberi*).**

Matin, M.A. Yule, W.N.; Martel, P. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1984. v. 77 (5). p. 1344-1348. ill. Includes 15 references. (NAL Call No.: 421 J822).

0956

**Components of resistance to *Fusarium* ear rot in field corn.**

PHYTAU. Gendloff, E.H. Rossman, E.C.; Casale, W.L.; Isleib, T.G.; Hart, L.P. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1986. v. 76 (7). p. 684-688. Includes 22 references. (NAL Call No.: DNAL 464.8 P56).

0957

**Composition of the mucilaginous spore matrix of *Colletotrichum graminicola*, a pathogen of corn, sorghum, and other grasses.**

JAFCAU. Ramadoss, C.S. Uhlig, J.; Carlson, D.M.; Butler, L.G.; Nicholson, R.L. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1985. v. 33 (4). p. 728-732. ill. Includes references. (NAL Call No.: DNAL 381 J8223).

0958

**Control of corn rots by seed selection /by James R. Holbert.**

Holbert, James R. 1890-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1920. Cover title. 4 p. : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.243).

0959

**Control of root, stalk and ear rot diseases of corn James R. Holbert, George N. Hoffer. --.**

Holbert, James R. Washington, D.C. : U.S. Dept. of Agriculture, 1920. 24 p. : ill. --. (NAL Call No.: DNAL Fiche S-70 no.1176).

0960

**Control of the root, stalk, and ear rot diseases of corn /James R. Holbert and George N. Hoffer.**

Holbert, James R. 1890-. Hoffer, G. N. 1887-. Washington, D.C. : U.S. Dept. of Agriculture, 1920. Cover title. "Contribution from the Bureau of Plant Industry." 24 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1176).

0961

**Corn ear rots in Illinois /by Benjamin Koehler.**  
Koehler, Benjamin, 1890-. Urbana, Ill. :  
University of Illinois, Agricultural Experiment  
Station, 1959. Cover title. 87 p. : ill. ; 23  
cm. Bibliography: p. 85-87. (NAL Call No.: DNAL  
100 I16S no.639).

0962

**Corn stalk rot is stress-related (*Gibberella*  
*zeae*, maize).**  
Bergstrom, G. Batavia, N.Y. : Agricultural Div.  
of Cooperative Extension, Four Western Plain  
Counties, N.Y. State. Ag impact. May 1984. v.  
11 (5). p. 12-13. ill. (NAL Call No.:  
S544.3.N7A45).

0963

**Corn stalk rot is stress-related (*Gibberella*  
*zeae*, maize).**  
Bergstrom, G.C. Canton, N.Y. : Agricultural  
Division, St. Lawrence County Cooperative  
Extension Association. St. Lawrence County  
cooperative extension news. May 1984. v. 68  
(5). p. 11. (NAL Call No.: S544.3.N7S3).

0964

**Correlation between leaf-feeding resistance to  
European corn borer (*Lepidoptera*: *Pyrallidae*)  
and resistance to northern corn leaf blight.**  
JEENAI, Guthrie, W.D. Barry, B.D.; Rossman,  
E.C.; Jarvis, J.L. College Park, Md. :  
Entomological Society of America. Journal of  
economic entomology. Aug 1985. v. 78 (4). p.  
811-814. ill. Includes references. (NAL Call  
No.: DNAL 421 J822).

0965

**Critical knowledge of mold life cycles gained.**  
AGREA. Mayberry, D. Washington, D.C. : The  
Administration. Agricultural research - U.S.  
Department of Agriculture, Agricultural  
Research Service. July/Aug 1984. v. 32 (10). p.  
4-5. ill. (NAL Call No.: DNAL 1.98 AG84).

0966

**Crown infection of corn by *Diplodia zeae* /by  
George L. McNew.**  
McNew, George Lee, 1908-. Ames, Iowa :  
Agricultural Experiment Station, Iowa State  
College of Agriculture and Mechanic Arts, 1937.  
p. 192-222 : ill. ; 22 cm. Bibliography: p.  
221-222. (NAL Call No.: DNAL 100 Io9 no.216).

0967

**Cultural and pathogenic variability in  
single-conidial hyphal-tip isolates of  
*Helminthosporium turcicum* Pass. /by Alice L.  
Robert.**  
Robert, Alice L. 1910-. Washington : U.S. Dept.  
of Agriculture, 1952. Caption title.~ Erratum  
included. 18 p. : ill. ; 23 cm. Literature  
cited: p. 16-18. (NAL Call No.: DNAL 1 Ag84Te  
no.1058).

0968

**Degree of aflatoxin B1 sensitivity in Virginia  
natural population of *Drosophila melanogaster*  
(Aflatoxin contamination of corn, peanuts).**  
Delawder, S. Chinnici, J.P. Richmond, Va. :  
Virginia Academy of Science. Virginia journal  
of science. Summer 1983. v. 34 (2). p. 48-57.  
Includes references. (NAL Call No.: 470 V81).

0969

**Diallel analysis of resistance of eight maize  
inbred lines to *Sphacelotheca reiliana*.**  
PHYTAJ. Whyte, I.V. Gevers, H.D. St. Paul,  
Minn. : American Phytopathological Society.  
Phytopathology. Jan 1988. v. 78 (1). p. 65-68.  
Includes references. (NAL Call No.: DNAL 464.8  
P56).

0970

**Differences in resistance between maize hybrids  
with or without the Ht1 gene when infected with  
*Exserohilum turcicum* race 2.**  
PHYTA. Leath, S. Pedersen, W.L. St. Paul, Minn.  
: American Phytopathological Society.  
Phytopathology. Mar 1986. v. 76 (3). p.  
257-260. Includes 14 references. (NAL Call No.:  
DNAL 464.8 P56).

0971

**Differentiation of maize genotypes for  
aflatoxin concentration in developing kernels.**  
CRPSAY. Widstrom, N.W. Wilson, D.M.; McMillian,  
W.W. Madison, Wis. : Crop Science Society of  
America. Crop science. Sept/Oct 1986. v. 26  
(5). p. 935-937. Includes references. (NAL Call  
No.: DNAL 64.8 C883).

0972

**Disease development and yield losses associated  
with northern leaf blight on corn.**  
PLDIDE. Perkins, J.M. Pedersen, W.L. St. Paul,  
Minn. : American Phytopathological Society.  
Plant disease. Oct 1987. v. 71 (10). p.  
940-943. Includes references. (NAL Call No.:  
DNAL 1.9 P69P).

## (PLANT DISEASES - FUNGAL)

0973

**Disease resistance in five cycles of 'BS9' corn synthetic selected for resistance to two generations of European corn borer.**

PHYTAJ. Klenke, J.R. Russell, W.A.; Guthrie, W.D.; Martinson, C.A.; Pedersen, W.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. May 1987. v. 77 (5). p. 735-739. Includes references. (NAL Call No.: DNAL 464.8 P56).

0974

**Disinfection of seed surfaces with sodium hypochlorite.**

PHYTAJ. Sauer, D.B. Burroughs, R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1986. v. 76 (7). p. 745-749. Includes references. (NAL Call No.: DNAL 464.8 P56).

0975

**Dissipation of the membrane potential in susceptible corn mitochondria by the toxin of Helminthosporium maydis, race T, and toxin analogs.**

PLPHA. Holden, M.U. Sze, H. Rockville, Md. : American Society of Plant Physiologists. Plant Physiology. July 1987. v. 84 (3). p. 670-676. Includes references. (NAL Call No.: DNAL 450 P692).

0976

**Dry rot of corn /by L.W. Durrell.**

Durrell, L. W. 1888-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1923. p. 348-376, 3 leaves of plates : ill. (some col.), maps, charts ; 22 cm. Bibliography: p. 376. (NAL Call No.: DNAL 100 Io9 no.77).

0977

**Ear resistance of maize inbreds to field aflatoxin contamination.**

CRPSAY. Widstrom, N.W. Wilson, D.M.; McMillian, W.W. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1984. v. 24 (6). p. 1155-1157. Includes 21 references. (NAL Call No.: DNAL 64.8 C883).

0978

**Ear rots of corn /by Thomas J. Burrill and James T. Barrett.**

Burrill, Thomas Jonathan, 1839-1916. Barrett, James T. 1876-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1909. Cover title. p. 63 -109 : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 100 I16S no.133).

0979

**Early corn inbred reactions to head smut, common smut, and common rust.**

NDFRA. Alexander, W.L. Cross, H.Z.; Lamey, H.A. Fargo, N.D. : The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Sept/Oct 1982. v. 40 (2). p. 29-31. ill. Includes references. (NAL Call No.: DNAL 100 N813B).

0980

**Effect of cultural practices, soil phosphorus, potassium, and pH on the incidence of fusarium head blight and deoxynivalenol levels in wheat.**

APMBA. Teich, A.H. Hamilton, J.R. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. June 1985. v. 49 (6). p. 1429-1431. Includes 17 references. (NAL Call No.: DNAL 448.3 AP5).

0981

**Effect of dew period and temperature on infection of seedling maize plants by Puccinia polysora.**

PLDRA. Hollier, C.A. King, S.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1985. v. 69 (3). p. 219-220. ill. Includes 6 references. (NAL Call No.: DNAL 1.9 P69P).

0982

**Effect of environmental and cultural factors on aflatoxin contamination of developing corn kernels.**

SCSBA. Lillehoj, E.B. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 27-34. Includes references. (NAL Call No.: DNAL 100 G29S0).

0983

**Effect of four inoculation techniques on infection and aflatoxin concentration of resistant and susceptible corn hybrids inoculated with Aspergillus flavus.**

PHYTA. Tucker, D.H. Jr. Trevathan, L.E.; King, S.B.; Scott, G.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Mar 1986. v. 76 (3). p. 290-293. Includes 22 references. (NAL Call No.: DNAL 464.8 P56).

0984

**Effect of host genotype on estimating relative parasitic fitness among populations of Helminthosporium carbonum Race 3 (Maize, rate-reducing resistance).**

Gregory, L.V. Ayers, J.E.; Nelson, R.R. St. Paul, Minn. : American Phytopathological

Society. Phytopathology. Sept 1984. v. 74 (9). p. 1024-1026. Includes 16 references. (NAL Call No.: 464.8 P56).

## 0985

**Effect of host genotype unit area on development of focal epidemics of bean rust and common maize rust in mixtures of resistant and susceptible plants.**

PHYTAJ. Mundt, C.C. Leonard, K.J. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1986. v. 76 (9). p. 895-900. Includes references. (NAL Call No.: DNAL 464.8 P56).

## 0986

**Effect of husk tightness and insect (Lepidoptera) infestation on aflatoxin contamination of preharvest maize.**

EVETEX. Barry, D. Lillehoj, E.B.; Widstrom, N.W.; McMillan, W.W.; Zuber, M.S.; Kwolek, W.F.; Guthrie, W.D. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1116-1118. Includes references. (NAL Call No.: DNAL QL461.E532).

## 0987

**Effect of illuminance on the resistance of inbred lines of corn to isolates of Colletotrichum graminicola.**

PHYTAJ. Jenns, A.E. Leonard, K.J. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Mar 1985. v. 75 (3). p. 281-286. Includes 14 references. (NAL Call No.: DNAL 464.8 P56).

## 0988

**Effect of pesticides on zearalenone production in culture and in corn plants.**

PHYTAJ. Draughon, F.A. Churchville, D.C. St. Paul, Minn. : American Phytopathological Society. Phytopathology. May 1985. v. 75 (5). p. 553-556. Includes 18 references. (NAL Call No.: DNAL 464.8 P56).

## 0989

**The effects of corn leaf rust on maturity and quality of fresh market ears of sweet corn (Puccinia sorghi, Minnesota).**

Randle, W.M. Davis, D.W.; Groth, J.V. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Sept 1984. v. 109 (5). p. 645-648. ill. Includes 15 references. (NAL Call No.: 81 S012).

## 0990

**Effects of corn plant age and cultivar on resistance to Cercospora zeae-maydis and sensitivity to Cercosporin.**

PLDRA. Gwinn, K.D. Stelzig, D.A.; Brooks, J.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. July 1987. v. 71 (7). p. 603-606. Includes references. (NAL Call No.: DNAL 1.9 P69P).

## 0991

**Effects of Ht, Ht2, and/or Ht3 genes in three maize inbreds on quantitative resistance to Exserohilum turcicum race 2.**

PLDRA. Leath, S. Pedersen, W.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. June 1986. v. 70 (6). p. 529-531. Includes 13 references. (NAL Call No.: DNAL 1.9 P69P).

## 0992

**Effects of irrigation and kernel injury on aflatoxin B1 production in selected maize hybrids.**

PLDRA. Fortnum, B.A. Manwiller, A. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1985. v. 69 (3). p. 262-265. ill. Includes 22 references. (NAL Call No.: DNAL 1.9 P69P).

## 0993

**Effects of methomyl and Helminthosporium maydis toxin on matrix volume, proton motive force, and NAD accumulation in maize (Zea mays L.) mitochondria.**

PLPHA. Berville, A. Ghazi, A.; Charbonnier, M.; Bonavent, J.F. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Oct 1984. v. 76 (2). p. 508-517. ill. Includes 36 references. (NAL Call No.: DNAL 450 P692).

## 0994

**Effects of night temperature and mist period on infection of sweet corn by Puccinia sorghi.**

PLDRA. Headrick, J.M. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1986. v. 70 (10). p. 950-953. Includes references. (NAL Call No.: DNAL 1.9 P69P).

## 0995

**Effects of pH on lignin and cellulose degradation by Streptomyces viridosporus.**

APMBA. Pometto, A.L. III. Crawford, D.L. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. Aug 1986. v. 52 (2). p. 246-250.

## (PLANT DISEASES - FUNGAL)

Includes 21 references. (NAL Call No.: DNAL 448.3 AP5).

0996

**Effects of plant metabolites on the *Aspergillus flavus* group and aflatoxin production.**

SCSBA. Wilson, D.M. Guellder, R.C.; Hill, R.A. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 13-15. (NAL Call No.: DNAL 100 G29S0).

0997

**Effects of qualitative and quantitative resistance on the development and spread of northern leaf blight of maize caused by *Exserohilum turcicum* races 1 and 2.**

PHYTAJ. Pataky, J.K. Perkins, J.M.; Leath, S. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Dec 1986. v. 76 (12). p. 1349-1352. Includes 24 references. (NAL Call No.: DNAL 464.8 P56).

0998

**Effects of temperature and illuminance on resistance of inbred lines of corn to isolates of *Bipolaris maydis*.**

PHYTAJ. Jenks, A.E. Leonard, K.J. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Mar 1985. v. 75 (3). p. 274-280. Includes 22 references. (NAL Call No.: DNAL 464.8 P56).

0999

**Effects of temperature and relative humidity on germinability and infectivity of *Puccinia polysora* uredospores.**

PLDRA. Hollier, C.A. King, S.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Nov 1985. v. 69 (11). p. 937-939. Includes 21 references. (NAL Call No.: DNAL 1.9 P69P).

1000

**Effects of temperature on sporulation, conidial germination, and infection of maize by *Peronosclerospora sorghi* from different geographical areas.**

PHYTAJ. Bonde, M.R. Peterson, G.L.; Duck, N.B. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Jan 1985. v. 75 (1). p. 122-126. Includes 11 references. (NAL Call No.: DNAL 464.8 P56).

1001

**Evaluation of captan as a seed treatment for corn.**

PLDRA. Pedersen, W.L. Perkins, J.M.; White, D.G. St. Paul, Minn. : American Phytopathological Society. Plant disease. Jan 1986. v. 70 (1). p. 45-49. Includes 10 references. (NAL Call No.: DNAL 1.9 P69P).

1002

**Expression of partial resistance to common rust in sweet corn hybrids at various host growth stages.**

PHYTAJ. Headrick, J.M. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Mar 1987. v. 77 (3). p. 454-458. Includes references. (NAL Call No.: DNAL 464.8 P56).

1003

**Factors affecting the development of head smut caused by *Sphacelotheca reiliana* on corn.**

PHYTAJ. Matyac, C.A. Kommedahl, T. St. Paul, Minn. : American Phytopathological Society. Phytopathology. May 1985. v. 75 (5). p. 577-581. Includes 25 references. (NAL Call No.: DNAL 464.8 P56).

1004

**Factors influencing lodging in corn /by Benjamin Koehler, G.H. Dungan, and J.R. Holbert.**

Koehler, Benjamin, 1890-. Dungan, George Harlan, 1887-. Holbert, James R., 1890-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, in cooperation with Office of Cereal Investigations, Bureau of Plant Industry, U.S. Dept. of Agriculture, 1925. Cover title. p. 309 -371 : ill. ; 23 cm. Bibliography: p. 371. (NAL Call No.: DNAL 100 I16S no.266).

1005

**Field evaluation of corn inbreds and selections for resistance to *Exserohilum turcicum* race 2.**

PLDRA. Pedersen, W.L. Perkins, J.M.; Radtke, J.A.; Miller, J. St. Paul, Minn. : American Phytopathological Society. Plant disease. May 1986. v. 70 (5). p. 376-377. Includes 8 references. (NAL Call No.: DNAL 1.9 P69P).

1006

**Fruity aromas from pink mold and their association with insect attraction.**

JAUPA. Hepperly, P.R. Rodriguez-Cancel, R.E. Mayaguez : University of Puerto Rico, Agricultural Experiment Station. The Journal of agriculture of the University of Puerto Rico.

July 1987. v. 71 (3). p. 327-330. Includes references. (NAL Call No.: DNAL 8 P832J).

1007

**Fungal interference with *Aspergillus flavus* infection and aflatoxin contamination of maize grown in a controlled environment.**

PHYTAJ. Wicklow, D.T. Horn, B.W.; Shotwell, O.L.; Hesselstine, C.W.; Caldwell, R.W. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Jan 1988. v. 78 (1). p. 68-74. Includes references. (NAL Call No.: DNAL 464.8 P56).

1008

**Fungal populations in U.S. farm-stored grain and their relationship to moisture, storage time, regions, and insect infestation (*Aspergillus glaucus*, oats, wheat, maize).**

Sauer, D.B. Storey, C.L.; Walker, D.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1984. v. 74 (9). p. 1050-1053. maps. Includes 13 references. (NAL Call No.: 464.8 P56).

1009

**Fungi causing stalk rot of conventional-tillage and no-tillage corn in Delaware.**

PLDRA. Byrnes, K.J. Carroll, R.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1986. v. 70 (3). p. 238-239. Includes 10 references. (NAL Call No.: DNAL 1.9 P69P).

1010

***Fusarium moniliforme* colonization of corn ears in Missouri.**

PLDRA. Calvert, O.H. Foudin, A.S.; Minor, H.C.; Krause, G.F. St. Paul, Minn. : American Phytopathological Society. Plant disease. Nov 1985. v. 69 (11). p. 988-990. maps. Includes 14 references. (NAL Call No.: DNAL 1.9 P69P).

1011

**Gene transfer system for the phytopathogenic fungus *Ustilago maydis*.**

PNASA. Wang, J. Holden, D.W.; Leong, S.A. Washington, D.C. : The Academy. Proceedings of the National Academy of Sciences of the United States of America. Feb 1988. v. 85 (3). p. 865-869. ill. Includes references. (NAL Call No.: DNAL 500 N21P).

1012

**Genetic analysis of *Exserohilum turcicum* lesion expansion on corn.**

PHYTAJ. Sigulas, K.M. Hill, R.R. Jr.; Ayers, J.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1988. v. 78 (2). p. 149-153. Includes references. (NAL Call No.: DNAL 464.8 P56).

1013

**Genetic control of aflatoxin production in maize.**

PLDRA. Gardner, C.A.C. Darrah, L.L.; Zuber, M.S.; Wallin, J.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. May 1987. v. 71 (5). p. 426-429. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1014

**Genetic improvement of corn for increased productivity in Louisiana.**

Kang, M.S. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1986? . p. 77-78. Includes references. (NAL Call No.: DNAL 100 L936).

1015

**Genetic selection and adaptation of *Cochliobolus heterostrophus* to corn hosts with partial resistance.**

PHYTAJ. Kolmer, J.A. Leonard, K.J. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1986. v. 76 (8). p. 774-777. Includes references. (NAL Call No.: DNAL 464.8 P56).

1016

**Growth characteristics of *Aspergillus flavus* on agar infused with maize kernel homogenates and aflatoxin contamination of whole kernel samples (Georgia).**

Widstrom, N.W. McMillian, W.W.; Wilson, D.M.; Garwood, D.L.; Glover, D.V. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1984. v. 74 (8). p. 887-890. Includes 11 references. (NAL Call No.: 464.8 P56).

1017

**Guidelines for mold control in high-moisture corn /prepared by Agricultural Engineering Research Division, Agricultural Research Service.**

Washington, D.C. : U.S. Dept. of Agriculture, 1969. Originally issued Sept. 1968. 16 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84F no.2238 1969).

## (PLANT DISEASES - FUNGAL)

1018

**Histological development of *Sphacelotheca reiliana* on *Zea mays*.**  
PHYTAJ. Matyac, C.A. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1985. v. 75 (8). p. 924-929. ill. Includes 11 references. (NAL Call No.: DNAL 464.8 P56).

1019

**Host preference correlated with chlorate resistance in *Macrophomina phaseolina*.**  
PLDRA. Pearson, C.A.S. Leslie, J.F.; Schwenk, F.W. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1987. v. 71 (9). p. 828-831. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1020

**Identification of slow-rusting resistance to *Puccinia polysora* in maize inbreds and single crosses.**  
PLDRA. Bailey, B.A. Schuh, W.; Frederiksen, R.A.; Bockholt, A.J.; Smith, J.D. St. Paul, Minn. : American Phytopathological Society. Plant disease. June 1987. v. 71 (6). p. 518-521. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1021

**Impact of husk type and species of infesting insects on aflatoxin contamination in preharvest corn at Tifton, Georgia.**  
JESCEP. McMillian, W.W. Widstrom, N.W.; Wilson, D.M. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. Oct 1987. v. 22 (4). p. 307-310. Includes references. (NAL Call No.: DNAL QL461.G4).

1022

**Improvement and genetic control of partial resistance in sweet corn to corn leaf rust.**  
JOSHB. Randle, W.M. Davis, D.W.; Groth, J.V. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Nov 1984. v. 109 (6). p. 777-781. Includes 24 references. (NAL Call No.: DNAL 81 S012).

1023

**Infection studies of *Diplodia zeae* (Schw.) Lev. and control of seedling blights of corn /by W.P. Raleigh.**  
Raleigh, W. P. 1901-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1930. p. 98-121 : ill. ; 22 cm. Bibliography: p. 121. (NAL Call No.: DNAL 100 Io9 no.124).

1024

**Influence of crop rotation on severity of crown and brace root rot caused in corn by *Rhizoctonia solani*.**  
PHYTA. Sumner, D.R. Bell, D.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1986. v. 76 (2). p. 248-252. Includes 23 references. (NAL Call No.: DNAL 464.8 P56).

1025

**Influence of inoculum from buried and surface corn residues on the incidence of corn anthracnose.**  
PHYTA. Lipps, P.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Nov 1985. v. 75 (11). p. 1212-1216. Includes 9 references. (NAL Call No.: DNAL 464.8 P56).

1026

**Influence of tillage on development of gray leaf spot and number of airborne conidia of *Cercospora zeae-maydis*.**  
PLDRA. Payne, G.A. Duncan, H.E.; Adkins, C.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1987. v. 71 (4). p. 329-332. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1027

**Inheritance of aflatoxin B1 levels in maize kernels under modified natural inoculation with *Aspergillus flavus*.**  
CRPSAY. Darrah, L.L. Lillehoj, E.B.; Zuber, M.S.; Scott, G.E.; Thompson, D.; West, D.R.; Widstrom, N.W.; Fortnum, B.A. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1987. v. 27 (5). p. 869-872. Includes references. (NAL Call No.: DNAL 64.8 C883).

1028

**Inheritance of resistance in *Bipolaris maydis* race 0 in crosses derived from nine resistant inbred lines of maize.**  
PHYTA. Burnette, D.C. White, D.G. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Nov 1985. v. 75 (11). p. 1195-1200. Includes 22 references. (NAL Call No.: DNAL 464.8 P56).

1029

**Inheritance of resistance of sweet corn inbred IL677a to *Puccinia sorghi* Schw.**  
HJHSA. Kim, S.K. Brewbaker, J.L. Alexandria, Va. : American Society for Horticultural Science. HortScience. Dec 1987. v. 22 (6). p. 1319-1320. Includes references. (NAL Call No.: DNAL SB1.H6).

1030

**An inhibitor produced by *Diplodia zeae* (Schw.) Lev. /by G.C. Kent.**  
 Kent, George Clarence, 1910-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1940. p. 656-671 : ill. ; 23 cm. Bibliography: p. 670-671. (NAL Call No.: DNAL 100 Io9 no.274).

1031

**Insect damage and aflatoxin contamination in preharvest corn: influence of genotype and ear wetting.**  
 GENSAB. McMillian, W.W. Widstrom, N.W.; Wilson, D.M. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 66-68. Includes references. (NAL Call No.: DNAL QL461.G4).

1032

**Interplot interference in field plots with leaf rust of maize.**  
 JOSH.B. Randle, W.M. Davis, D.W.; Groth, J.V. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Mar 1986. v. 111 (2). p. 297-300. Includes 16 references. (NAL Call No.: DNAL 81 S012).

1033

**Iron specifically protects corn protoplasts from T-toxin of *Cochliobolus heterostrophus*.**  
 PLPHA. MacRae, W.D. Yoder, D.C. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Aug 1987. v. 84 (4). p. 1257-1264. ill. Includes references. (NAL Call No.: DNAL 450 P692).

1034

**Irrigation management and root and stalk rot of corn.**  
 PLDRA. Sumner, D.R. Hook, J.E. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1985. v. 69 (3). p. 239-243. Includes 21 references. (NAL Call No.: DNAL 1.9 P69P).

1035

**Isozyme analysis to differentiate species of *Peronosclerospora* causing downy mildews of maize.**  
 PHYTAJ. Bonde, M.R. Peterson, G.L.; Dowler, W.M.; May, B. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Nov 1984. v. 74 (11). p. 1278-1283. Includes 33 references. (NAL Call No.: DNAL 464.8 P56).

1036

**Leaf blights of corn / Arnold J. Ullstrup .**  
 Ullstrup, A. J. 1907-. Lafayette, Ind. : Purdue University Agricultural Experiment Station, 1952. Cover title.~ In cooperation with Bureau of Plant Industry, Research Administration, U.S. Department of Agriculture, Washington, D.C. 24 p. : ill. ; 23 cm. Bibliography: p. 22. (NAL Call No.: DNAL 100 In2P no.572).

1037

**A major gene for resistance to anthracnose stalk rot in maize.**  
 PHYTAJ. Badu-Apraku, B. Gracen, V.E.; Bergstrom, G.C. St. Paul, Minn. : American Phytopathological Society. Phytopathology. June 1987. v. 77 (6). p. 957-959. Includes references. (NAL Call No.: DNAL 464.8 P56).

1038

**Mating types, virulence, and cultural characteristics of *Exserohilum turcicum* race 2.**  
 PLDRA. Pedersen, W.L. Brandenburg, L.J. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1986. v. 70 (4). p. 290-292. Includes 14 references. (NAL Call No.: DNAL 1.9 P69P).

1039

**Methods for screening corn for resistance to kernel infection and aflatoxin production by *Aspergillus flavus*.**  
 SCSBA. King, S.B. Wallin, J.R. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 7-80. (NAL Call No.: DNAL 100 G29S0).

1040

**Mitochondrial electron transport in a carboxin-resistant, antimycin A-sensitive mutant of *Ustilago maydis* (Corn smut fungus).**  
 Ziogas, B.N. Georgopoulos, S.G. New York, N.Y. : Academic Press. Pesticide biochemistry and physiology. Aug 1984. v. 22 (1). p. 24-31. ill. Includes references. (NAL Call No.: SB951.P49).

1041

**Mode of methomyl and *Bipolaris maydis* (race T) toxin in uncoupling Texas male-sterile cytoplasm corn mitochondria.**  
 PLPHA. Klein, R.R. Koeppe, D.E. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1985. v. 77 (4). p. 912-916. Includes 27 references. (NAL Call No.: DNAL 450 P692).

## (PLANT DISEASES - FUNGAL)

1042

**A modification of Gregory's model for describing plant disease gradients.**  
PHYTAJ. Mundt, C.C. Leonard, K.J. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1985. v. 75 (8). p. 930-935. Includes 12 references. (NAL Call No.: DNAL 464.8 P56).

1043

**Mold-eating mold might save corn.**  
AGREA. Pierce, R. Washington, D.C. : The Administration. Agricultural research - U.S. Department of Agriculture, Agricultural Research Service. June/July 1986. v. 34 (6). p. 12-13. ill. (NAL Call No.: DNAL 1.98 AG84).

1044

**Molecular technology for studying fungus/plant interactions.**  
Yoder, O.C. Turgeon, B.G.; Garber, R.C. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1985. Plant cell/cell interactions / edited by Ian Sussex ... et al. . Paper presented at a meeting on the topic of plant cell/cell interactions at the Banbury Conference Center of Cold Spring Harbor Laboratory, New York, October 2-4, 1985. 131-135. Includes references. (NAL Call No.: DNAL QK725.P552).

1045

**Moniliformin production in Fusarium section Liseola.**  
MYCOAE. Marasas, W.F.O. Thiel, P.G.; Rabie, C.J.; Nelson, P.E.; Toussoun, T.A. Bronx, N.Y. : The New York Botanical Garden. Mycologia. Mar/Apr 1986. v. 78 (2). p. 242-247. Includes 29 references. (NAL Call No.: DNAL 450 M99).

1046

**Mycoparasitic fungi associated with potential stalk rot pathogens of corn.**  
PHYTA. Vakili, N.G. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Nov 1985. v. 75 (11). p. 1201-1207. ill. Includes 26 references. (NAL Call No.: DNAL 464.8 P56).

1047

**Nature of field infection of corn by Aspergillus flavus.**  
SCSBA. Payne, G.A. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 16-19. (NAL Call No.: DNAL 100 G29S0).

1048

**Nematode control related to fusarium wilt in soybean and root rot and zinc deficiency in corn.**  
JONEB. Minton, N.A. Parker, M.B.; Sumner, D.R. Raleigh, N.C. : Society of Nematologists. Journal of nematology. July 1985. v. 17 (3). p. 314-321. Includes 26 references. (NAL Call No.: DNAL QL391.N4J62).

1049

**Observations on mold development and on deterioration in stored yellow dent shelled corn /by G. Semeniuk, C.M. Nagel and J.C. Gilman.**  
Semeniuk, G. Nagel, C. M.; Gilman, J. C. 1890-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1947. p. 255-284 : ill., charts ; 23 cm. Bibliography: p. 284. (NAL Call No.: DNAL 100 Io9 no.349).

1050

**Occurrence of chlorotic spots on corn seedlings infected with Sphacelotheca reiliana and their use in evaluation of head smut resistance.**  
PLDRA. Matyac, C.A. Kommedahl, T. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1985. v. 69 (3). p. 251-254. ill. Includes 9 references. (NAL Call No.: DNAL 1.9 P69P).

1051

**On corn: eyespot.**  
SDFHA. Brookings, S.D. : The Station. South Dakota farm and home research - South Dakota, Agricultural Experiment Station. 1984. v. 35 (2). p. 13. ill. (NAL Call No.: DNAL 100 SD825).

1052

**Papilla formation in corn root-cap cells and leaves inoculated with Colletotrichum graminicola.**  
PHYTAJ. Sherwood, R.T. St. Paul, Minn. : American Phytopathological Society. Phytopathology. June 1987. v. 77 (6). p. 930-934. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

1053

**Partial rust resistance in sweet corn hybrid seedlings.**  
PHYTAJ. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1986. v. 76 (7). p. 702-707. Includes 17 references. (NAL Call No.: DNAL 464.8 P56).

1054

**Pesticide inhibition of aflatoxin and zearalenone production in corn and in culture.**  
TFHSA. Draughon, F.A. Elahi, M.E.; Churchville, D.C.; West, D.R. Knoxville, Tenn. : The Station. Tennessee farm and home science - Tennessee Agricultural Experiment Station. Fall 1986. (140). p. 3-7. Includes references. (NAL Call No.: DNAL 100 T25F).

1055

**Phytotoxins from the pathogenic fungi Drechslera maydis and Drechslera sorghicola.**  
PNASA. Sugawara, F. Strobel, G.; Strange, R.N.; Siedow, J.N.; Van Duyne, G.D.; Clardy, J. Washington, D.C. : The Academy. Proceedings of the National Academy of Sciences of the United States of America. May 1987. v. 84 (10). p. 3081-3085. ill. Includes references. (NAL Call No.: DNAL 500 N21P).

1056

**Potential yield reductions in maize associated with an anthracnose/European corn borer pest complex in New York.**  
PHYTAJ. Keller, N.P. Bergstrom, G.C.; Carruthers, R.I. St. Paul, Minn. : American Phytopathological Society. Phytopathology. June 1986. v. 76 (6). p. 586-589. Includes 27 references. (NAL Call No.: DNAL 464.8 P56).

1057

**Preharvest aflatoxin contamination: effect of moisture and substrate variation in developing cottonseed and corn kernels.**  
APMBA. Lillehoj, E.B. Wall, J.H.; Bowers, E.J. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. Mar 1987. v. 53 (3). p. 584-586. Includes references. (NAL Call No.: DNAL 448.3 AP5).

1058

**Preharvest aflatoxin contamination of dent corn in Indiana in 1983 (Aspergillus flavus).**  
Tuite, J. Sensmeier, R.; Koh-Knox, C.; Noel, R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1984. v. 68 (10). p. 893-895. Includes 19 references. (NAL Call No.: 1.9 P69P).

1059

**Preharvest infection of corn silks and kernels by Aspergillus flavus.**  
PHYTAJ. Marsh, S.F. Payne, G.A. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Nov 1984. v. 74 (11). p. 1284-1289. ill. Includes 29 references. (NAL

Call No.: DNAL 464.8 P56).

1060

**Prevalence and virulence of Fusarium spp. associated with stalk rot of corn in Colorado.**  
PLDRA. Gilbertson, R.L. Brown, W.M. Jr.; Ruppel, G. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1985. v. 69 (12). p. 1065-1068. Includes 30 references. (NAL Call No.: DNAL 1.9 P69P).

1061

**Prevention and control of aflatoxin in corn.**  
SCSBA. Widstrom, N.W. Zuber, M.S. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 72-76. (NAL Call No.: DNAL 100 G29S0).

1062

**Production of aflatoxin in wounded and whole maize kernels by Aspergillus flavus.**  
PLDRA. Wallin, J.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. May 1986. v. 70 (5). p. 429-430. Includes 12 references. (NAL Call No.: DNAL 1.9 P69P).

1063

**Production of aflatoxin on damaged corn under controlled environmental conditions.**  
TAAEA. Wieman, D.M. White, G.M.; Taraba, J.L.; Ross, I.J.; Hicks, C.L.; Langlois, B.E. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. July/Aug 1986. v. 29 (4). p. 1150-1155. ill. Includes references. (NAL Call No.: DNAL 290.9 AM32T).

1064

**Production of deepoxy-diacetoxyscirpenol in a culture of Fusarium graminearum.**  
APMBA. Chatterjee, K. Pawlosky, R.J.; Mirocha, C.J.; Zhu, T.X. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. Aug 1986. v. 52 (2). p. 311-313. Includes 8 references. (NAL Call No.: DNAL 448.3 AP5).

1065

**Production of zearalenone and deoxynivalenol in commercial sweet corn.**  
PLDRA. Hart, L.P. Braselton, W.E. Jr.; Stebbins, T.C. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1982. v. 66 (12). p. 1133-1135. Includes references. (NAL Call No.: DNAL 1.9 P69P).

## (PLANT DISEASES - FUNGAL)

1066

**Quantitative relationships between sweet corn yield and common rust, *Puccinia sorghi*.**  
PHYTAJ. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1987. v. 77 (7). p. 1066-1071. Includes references. (NAL Call No.: DNAL 464.8 P56).

1067

**Reaction of sweet corn germ plasm to common rust and an evaluation of Rp resistance in Illinois.**  
PLDRA. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1987. v. 71 (9). p. 824-828. ill. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1068

**Reduced fitness associated with TOX1 of *Cochliobolus heterostrophus*.**  
PHYTAJ. Klittich, C.U.R. Bronson, C.R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Dec 1986. v. 76 (12). p. 1294-1298. Includes 24 references. (NAL Call No.: DNAL 464.8 P56).

1069

**Reduced tillage: are there hidden disease problems?**  
CRSDA. Johanson, K.L. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Feb 1987. v. 39 (5). p. 16-17. ill. (NAL Call No.: DNAL 6 W55).

1070

**Reduction of aflatoxin contamination in corn by irrigation and tillage.**  
PHYTAJ. Payne, G.A. Cassel, D.K.; Adkins, C.R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1986. v. 76 (7). p. 697-684. Includes 20 references. (NAL Call No.: DNAL 464.8 P56).

1071

**Relation of husk covering to smut of corn ears /by C.H. Kyle.**  
Kyle, C. H. b. 1878. Washington : U.S. Dept. of Agriculture, 1929. Caption title. 8 p., 2 p. of plates : ill. ; 23 cm. Literature cited: p. 6-7. (NAL Call No.: DNAL 1 Ag84Te no.120).

1072

**Relation of the character of the endosperm to the susceptibility of dent corn to root rotting /by John F. Trost.**  
Trost, John Francis, 1897-. Washington, D.C. : U.S. Dept. of Agriculture, 1922. Caption title.~ "April 22, 1922."~ "Professional paper.". 7 p., 2 p. of plates ; 24 cm. (NAL Call No.: DNAL 1 Ag84B no.1062).

1073

**Relationship of harvest date and host genotype to infection of maize kernels by *Fusarium moniliforme*.**  
PLDRA. Dchor, T.E. Trevathan, L.E.; King, S.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1987. v. 71 (4). p. 311-313. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1074

**Relationships among reactions of sweet corn hybrids to Goss' wilt, Stewart's bacterial wilt, and northern corn leaf blight.**  
PLDRA. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1985. v. 69 (10). p. 845-848. Includes 23 references. (NAL Call No.: DNAL 1.9 P69P).

1075

**Response of corn hybrids to aflatoxin formation by *Aspergillus flavus*.**  
AAEBA. Davis, N.D. Currier, C.G.; Diener, U.L. Auburn, Ala. : The Station. Bulletin - Alabama Agricultural Experiment Station. Nov 1985. (575). 23 p. Includes 43 references. (NAL Call No.: DNAL 100 AL1S (1)).

1076

**Results of the 1971 corn blight watch experiment /by R.B. MacDonald ... et al. .**  
MacDonald, Robert B. West Lafayette, IN : Laboratory for Applications of Remote Sensing, Purdue University, 1972? . Cover title.~ "LARS Print 100272."~ "Presented at the 8th International Symposium on Remote Sensing of Environment Ann Arbor, Michigan, 1972.". 33 p. : ill. ; 28 cm. Bibliography: p. 17. (NAL Call No.: DNAL SB608.M2R4).

1077

**Rhizosphere competence of *Trichoderma harzianum*.**  
PHYTAJ. Ahmad, J.S. Baker, R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1987. v. 77 (2). p. 182-189. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

1078

**Ripening of *Eupenicillium ochrosalmoneum* ascostromata on soil.**  
MYCOAE. Horn, B.W. Wicklow, D.T. Bronx, N.Y. : The New York Botanical Garden. Mycologia. Mar/Apr 1986. v. 78 (2). p. 248-252. Includes references. (NAL Call No.: DNAL 450 M99).

1079

**Role of arthropods in field contamination.**  
SCSBA. McMillian, W.W. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 20-22. (NAL Call No.: DNAL 100 G29S0).

1080

**Role of calmodulin inhibition in the mode of action of ophiobolin A.**  
PLPHA. Leung, P.C. Taylor, W.A.; Wang, J.H.; Tipton, C.L. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Feb 1985. v. 77 (2). p. 303-308. ill. Includes 19 references. (NAL Call No.: DNAL 450 P692).

1081

**Role of selected arthropods in the contamination of corn by *Aspergillus flavus* as measured by aflatoxin production.**  
SCSBA. Rodriguez, J.G. Patterson, C.G.; Potts, M.F.; Poneleit, C.G.; Beine, R.L. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 23-26. (NAL Call No.: DNAL 100 G29S0).

1082

**Role of selected corn insects and plant stress in aflatoxin production in Kentucky corn.**  
TKASAT. Rodriguez, J.G. Patterson, C.G.; Potts, M.F.; Poneleit, C.G.; Beine, R.L. Louisville, K.Y. : The Academy. Transactions of the Kentucky Academy of Science. Sept 1984. v. 45 (3/4). p. 138-143. Includes 10 references. (NAL Call No.: DNAL 500 K41).

1083

**Seed corn infection with *Fusarium moniliforme* and its relation to the root and stalk rots.**  
KAEB. Valteau, W.D. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. May 1, 1920. (226). p. 25-51. ill. Includes 14 references. (NAL Call No.: DNAL 100 K41 (2)).

1084

**Segregation for resistance to aflatoxin contamination among seeds on an ear of hybrid maize.**  
CRPSAY. Widstrom, N.W. McMillian, W.W.; Wilson, D.M. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1987. v. 27 (5). p. 961-963. Includes references. (NAL Call No.: DNAL 64.8 C883).

1085

**Single and combined effects of the lesion nematode and *Colletotrichum graminicola* on growth and anthracnose leaf blight of corn.**  
PHYTAJ. Nicholson, R.L. Bergeson, G.B.; DeGennaro, F.P.; Viveiros, D.M. St. Paul, Minn. : American Phytopathological Society. Phytopathology. June 1985. v. 75 (6). p. 654-661. Includes 30 references. (NAL Call No.: DNAL 464.8 P56).

1086

**Site of action of factors for resistance to *Fusarium moniliforme* in maize (Pericarp genotype, breeding for disease resistance).**  
Scott, G.E. King, S.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1984. v. 68 (9). p. 804-806. Includes 10 references. (NAL Call No.: 1.9 P69P).

1087

**Smut expression and resistance of corn to *Sphacelotheca reiliana* in Minnesota (Head smut, hybrids, inbreds).**  
Stromberg, E.L. Stienstra, W.C.; Kommedahl, T.; Matyac, C.A.; Windels, C.E.; Geadelmann, J.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1984. v. 68 (10). p. 880-884. ill. Includes 13 references. (NAL Call No.: 1.9 P69P).

1088

**The smuts of wheat, oats, barley, and corn /by Edward C. Johnson.**  
Johnson, Edward C. Washington, D.C. : U.S. Dept. of Agriculture, 1912. Cover title. 32 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.507).

1089

**Soil-inhabiting fungi attacking the roots of maize /by Wen-chun Ho.**  
Ho, Wen-chun. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1944. "Bureau of Plant Industry, Soils and Agricultural

## (PLANT DISEASES - FUNGAL)

Engineering, U.S. Department of Agriculture, cooperating."-- T.P. p. 403-446 : ill. ; 23 cm. Bibliography: p. 443-446. (NAL Call No.: DNAL 100 Io9 no.332).

1090

**Some characteristics of toxigenic and nontoxigenic isolates of *Aspergillus flavus* and *Aspergillus parasiticus*.**

SCSBA. Davis, N.D. Diener, U.L. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Feb 1983. (279). p. 1-5. (NAL Call No.: DNAL 100 G29S0).

1091

**Some of the factors influencing the infection and pathogenicity of *Ustilago zeae* (Beckm.)**

**Unger on *Zea mays* L. /by Glen N. Davis.**  
Davis, Glen N. 1906-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1936. Taken from Ph.D. Thesis (Iowa State College, 1934). p. 250-278 : ill., charts ; 22 cm. Bibliography: p. 277-278. (NAL Call No.: DNAL 100 Io9 no.199).

1092

**Southern corn leaf blight a status report /by Laboratory for Applications of Remote Sensing Staff.**

West Lafayette, Ind. : Purdue University, 1970. Caption title.~ "August 31, 1970.". 5, 11 leaves ; 28 cm. (NAL Call No.: DNAL S494.5.E8S68).

1093

**Spatial and temporal development of common rust in susceptible and partially resistant sweet corn hybrids.**

PHYTAJ. Headrick, J.M. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1988. v. 78 (2). p. 227-233. Includes references. (NAL Call No.: DNAL 464.8 P56).

1094

**Sporulation of *Peronosclerospora sorghi*, *Peronosclerospora sacchari*, and *Peronosclerospora philippinensis* on maize.**

PHYTAJ. Duck, N.B. Bonde, M.R.; Peterson, G.L.; Bean, G.A. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Mar 1987. v. 77 (3). p. 438-441. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

1095

**Stalk rots of corn and sorghum.**

Jardine, D.J. Manhattan, Kan. : The Service. L - Cooperative Extension Service, Kansas State University. Apr 1986. (741). 4 p. ill. (NAL Call No.: DNAL 275.29 K13LE).

1096

**Studies on a fusarium disease of corn and sorghum, (preliminary) /by L.H. Pammel, C.M. King and J.L. Seal.**

Pammel, L. H. 1862-1931. King, Charlotte M. 1864-1937.; Seal, James Lewis. 1893-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1916. p. 116-136 : ill. ; 22 cm. Includes bibliographical references. (NAL Call No.: DNAL 100 Io9 no.33).

1097

**A study of *Sclerospora graminicola* (Sacc.) Schroet. on *Setaria viridis* (L.) Beauv., and *Zea mays* L. /by I.E. Melhus, F.H. Van Haltern and Donald E. Bliss.**

Melhus, I. E. 1880-. Van Haltern, Frank.; Bliss, Donald E. 1903-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1928. p. 298-338 : ill. ; 22 cm. Bibliography: p. 337-338. (NAL Call No.: DNAL 100 Io9 no.111).

1098

**Suppression of corn head smut with seed and soil treatments.**

PLDRA. Stienstra, W.C. Kommedahl, T.; Stromberg, E.L.; Matyac, C.A.; Windels, C.E.; Morgan, F. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1985. v. 69 (4). p. 301-302. Includes 9 references. (NAL Call No.: DNAL 1.9 P69P).

1099

**Survival of *Rhizoctonia solani* and other soilborne basidiomycetes in fallow soil.**

PLDIDE. Bell, D.K. Sumner, D.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1987. v. 71 (10). p. 911-915. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1100

**Survival of teliospores of *Sphacelotheca reiliana* in soil.**

PHYTAJ. Matyac, C.A. Kommedahl, T. St. Paul, Minn. : American Phytopathological Society. Phytopathology. May 1986. v. 76 (5). p. 487-490. Includes 14 references. (NAL Call No.: DNAL 464.8 P56).

1101

**Susceptibility of corn to isolates of *Colletotrichum graminicola* pathogenic to other grasses.**

PLDRA. Jamil, F.F. Nicholson, R.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1987. v. 71 (9). p. 809-810. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1102

**A technique for sclerotial production by *Cephalosporium maydis*.**

PPRBA. Sabet, K.K. Rome : World Reporting Service on Plant Diseases and Pests, FAO. Plant protection bulletin. 1984. v. 32 (4). p. 141-142. ill. Includes 3 references. (NAL Call No.: DNAL 421 P692).

1103

**Transient changes in hydraulic resistance caused in corn roots by *Fusarium moniliforme*.**

PHYTAJ. Schneider, R.W. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Oct 1984. v. 74 (10). p. 1230-1233. Includes 19 references. (NAL Call No.: DNAL 464.8 P56).

1104

**Two enzymes involved in biosynthesis of the host-selective phytotoxin HC-toxin.**

PNASA. Walton, J.D. Washington, D.C. : The Academy. Proceedings of the National Academy of Sciences of the United States of America. Dec 1987. v. 84 (23). p. 8444-8447. ill. Includes references. (NAL Call No.: DNAL 500 N21P).

1105

**Use of phytotoxins in selection of disease resistant mutants in tissue culture.**

ISJRA6. Gengenbach, B.G. Rines, H.W. Ames, Iowa : Iowa State University. Iowa state journal of research. May 1986. v. 60 (4). p. 449-476. ill. Includes references. (NAL Call No.: DNAL 470 I09).

1106

**Variability in isolates of *Cercospora zeae-maydis*.**

PHYTA. Bair, W. Ayers, J.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1986. v. 76 (2). p. 129-132. Includes 15 references. (NAL Call No.: DNAL 464.8 P56).

1107

**Variable chlorate resistance in *Macrophomina phaseolina* from corn, soybean, and soil.**

PHYTAJ. Pearson, C.A.S. Leslie, J.F.; Schwenk, F.W. St. Paul, Minn. : American Phytopathological Society. Phytopathology. June 1986. v. 76 (6). p. 646-649. ill. Includes 23 references. (NAL Call No.: DNAL 464.8 P56).

1108

**Variation in pathogenicity, virulence, and aggressiveness of *Colletotrichum graminicola* on corn.**

PHYTAJ. White, D.G. Yanney, J.; Anderson, B. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1987. v. 77 (7). p. 999-1001. Includes references. (NAL Call No.: DNAL 464.8 P56).

1109

**A 13-Kilodalton maize mitochondrial protein in *Escherichia coli* confers sensitivity to *Bipolaris maydis* toxin.**

SCIEA. Dewey, R.E. Siedow, J.N.; Timothy, D.H.; Levings, C.S. III. Washington, D.C. : American Association for the Advancement of Science. Science. Jan 15, 1988. v. 239 (4837). p. 293-295. Includes references. (NAL Call No.: DNAL 470 SCI2).

# PLANT DISEASES – BACTERIAL

1110

**A bacterial disease of corn / Thomas J. Burrill .**

Burrill, Thomas Jonathan, 1839-1916. Champaign, Ill. : University of Illinois Agricultural Experiment Station, 1889. Caption title. p. 165 -176 : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 100 I16S no.6).

1111

**Bacterial wilt and Stewarts leaf blight of corn /by Alice L. Robert.**

Robert, Alice L. 1910-. Washington, D.C. : U.S. Dept. of Agriculture, 1967. 12 p. : ill., map. ; 24 cm. (NAL Call No.: DNAL 1 Ag84F no.2092 1967).

1112

**Bacterial wilt and stewarts leaf blight of corn /by Alice L. Robert.**

Robert, Alice L. 1910-. Washington, D.C. : U.S. Dept. of Agriculture, 1960. "Supersedes Farmers' bulletin 1878, Bacterial wilt of corn, by C. Elliot."~ Originally issued Oct. 1955. 13 p. : ill., 1 map : 23 cm. (NAL Call No.: DNAL 1 Ag84F no.2092 1960).

1113

**Bacterial wilt and Stewarts leaf blight of corn by Alice L. Robert . --.**

Robert, Alice L. 1910-. Washington, D.C. : U.S. Dept. of Agriculture, 1967. 12 p. : ill., map --. (NAL Call No.: DNAL Fiche S-70 no.2092 1967).

1114

**Bacterial wilt of corn / by Charlotte Elliott .**

Elliott, Charlotte, 1883-. Washington, D.C. : U.S. Dept. of Agriculture, 1941. Cover title.~ Contribution of the Bureau of Plant Industry. 21 p. : ill., map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1878).

1115

**Bacterial wilt of corn /by Frederick V. Rand and Lillian C. Cash.**

Rand, Frederick Vernon, 1883-1961. Cash, Lillian C. Washington : U.S. Dept. of Agriculture, 1933. Caption title. 31 p., 3 p. of plates : ill. ; 23 cm. Literature cited: p. 29-30. (NAL Call No.: DNAL 1 Ag84Te no.362).

1116

**Classification of sweet corn hybrid reactions to common rust, northern leaf blight, Stewart's wilt, and Goss' wilt and associated yield reductions.**

PHYTAJ. Pataky, J.K. Headrick, J.M.; Suparyono. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1988. v. 78 (2). p. 172-178. Includes references. (NAL Call No.: DNAL 464.8 P56).

1117

**Comparison of monoclonal antibodies and polyclonal antibodies in detection of the aster yellows mycoplasmalike organism.**

PHYTA. Lin, C.P. and Chen, T.A. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Jan 1986. v. 76 (1). p. 45-50. ill. Includes 36 references. (NAL Call No.: DNAL 464.8 P56).

1118

**Control of root, stalk and ear rot diseases of corn James R. Holbert, George N. Hoffer . --.**

Holbert, James R. Washington, D.C. : U.S. Dept. of Agriculture, 1920. 24 p. : ill. --. (NAL Call No.: DNAL Fiche S-70 no.1176).

1119

**Control of the root, stalk, and ear rot diseases of corn /James R. Holbert and George N. Hoffer.**

Holbert, James R. 1890-. Hoffer, G. N. 1887-. Washington, D.C. : U.S. Dept. of Agriculture, 1920. Cover title.~ "Contribution from the Bureau of Plant Industry.". 24 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1176).

1120

**Cornstalk rots in Illinois /by Benjamin Koehler.**

Koehler, Benjamin, 1890-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1960. Cover title. 90 p. : ill. ; 23 cm. Bibliography: p. 85-90. (NAL Call No.: DNAL 100 I16S no.658).

1121

**Erwinia chrysanthemi: serological comparisons of strains from Zea mays and other hosts.**

PHYTAJ. Dickey, R.S. Claflin, L.E.; Zumoff, C.H. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Mar 1987. v. 77 (3). p. 426-430. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

1122

**Expression from heterologous promoters in electroporated carrot protoplasts.**

PLPHA. Boston. R.S. Becwar, M.R.; Ryan, R.D.; Goldsbrough, P.B.; Larkins, B.A.; Hodges, T.K. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1987. v. 83 (4). p. 742-746. ill. Includes references. (NAL Call No.: DNAL 450 P692).

1123

**Genetics of resistance to bacterial wilt in maize /by E.J. Wellhausen.**

Wellhausen, E. J. 1907-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1937. p. 74-114 : ill., charts ; 23 cm. Bibliography: p. 114. (NAL Call No.: DNAL 100 Io9 no.224).

1124

**Holcus bacterial spot of Zea mays and Holcus species /by James B. Kendrick.**

Kendrick, James B. 1893-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1926. p. 304-334 : ill. ; 22 cm. Bibliography: p. 333-334. (NAL Call No.: DNAL 100 Io9 no.100).

1125

**Identities of new spiropasmas reported in maize in the United States.**

Davis, R.E. Lee, I.M. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 51-55. ill. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1126

**Introduction of a zein gene into the Ti plasmid of Agrobacterium tumefaciens.**

Goldsbrough, P.B. Karcher, S.U.; Gelvin, S.B.; Larkins, B.A. New York : Alan R. Liss. Cellular and molecular biology of plant stress. Paper presented at the "Symposium on Plant Molecular Biology," April 16-22, 1983, Keystone, Colorado. 1983. v. 12. p. 35-43. ill. Includes 14 references. (NAL Call No.: DNAL QH506.U34).

1127

**A List of references, maize virus and mycoplasma diseases.**

Wooster, Ohio : Maize Virus Information Service, Ohio Agricultural Research Development Center, 1981-. Title from cover.~ Each list is an addendum to the previous list. v. ; 28 cm. (NAL Call No.: DNAL Z5354.P3C58).

1128

**Origins of leafhopper vectors of maize pathogens in Mesoamerica.**

Nault, L.R. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 75-82. ill., maps. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1129

**Plant community diversity, herbivore movement, and an insect-transmitted disease of maize.**

ECOLA. Power, A.G. Tempe, Ariz : Ecological Society of America. Ecology : a publication of the Ecological Society of America. Dec 1987. v. 68 (6). p. 1658-1669. Includes references. (NAL Call No.: DNAL 410 EC7).

1130

**Plasmid pDC190: distribution among Erwinia stewartii strains and nonassociation with virulence.**

PHYTA. Frederick, R.D. Coplin, D.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1986. v. 76 (2). p. 165-170. ill. Includes 14 references. (NAL Call No.: DNAL 464.8 P56).

1131

**Population dynamics of Clavibacter michiganense subsp. nebraskense in field-grown dent corn and popcorn.**

PLDRA. Smidt, M. Vidaver, A.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. Nov 1986. v. 70 (11). p. 1031-1036. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1132

**Prediction of Stewart's wilt disease in single and three-way crosses in maize.**

PLDRA. Forgey, W.M. Blanco, M.H.; Darrah, L.L.; Zuber, M.S. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1982. v. 66 (12). p. 1159-1162. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1133

**Relationships among reactions of sweet corn hybrids to Goss' wilt, Stewart's bacterial wilt, and northern corn leaf blight.**

PLDRA. Pataky, J.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1985. v. 69 (10). p. 845-848. Includes 23 references. (NAL Call No.: DNAL 1.9 P69P).

## **(PLANT DISEASES - BACTERIAL)**

**1134**

**Resistance of dent corn to *Basisporium gallarum* Moll. /by C.S. Reddy.**

Reddy, C. S. 1887-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1933. 40 p. : ill., charts ; 22 cm. Bibliography: p. 40. (NAL Call No.: DNAL 100 Io9 no.167).

**1135**

**Stalk rots of corn and sorghum.**

Jardine, D.J. Manhattan, Kan. : The Service. L - Cooperative Extension Service, Kansas State University. Apr 1986. (741). 4 p. ill. (NAL Call No.: DNAL 275.29 K13LE).

**1136**

**Transfer, mapping, and cloning of *Pseudomonas syringae* pv. *syringae* plasmid pCG131 and assessment of its role in virulence.**

PHYTAJ. Gonzalez, C.F. Layher, S.K.; Vidaver, A.K.; Olsen, R.H. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Oct 1984. v. 74 (10). p. 1245-1250. ill. Includes 22 references. (NAL Call No.: DNAL 464.8 P56).

**1137**

**The transmission of corn stunt spiroplasma by natural and experimental vectors.**

Markham, P.G. Alivizatos, A.S. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 56-61. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

**1138**

**Variation among strains of *Clavibacter michiganense* subsp. *nebraskense* isolated from a single popcorn field.**

PHYTAJ. Smidt, M.L. Vidaver, A.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1987. v. 77 (2). p. 388-392. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

**1139**

***Xanthomonas campestris* pv. *translucens* strains active in ice nucleation.**

PLDIDE. Kim, H.K. Orser, C.; Lindow, S.E.; Sands, D.C. St. Paul, Minn. : American Phytopathological Society. Plant disease. Nov 1987. v. 71 (11). p. 994-997. Includes references. (NAL Call No.: DNAL 1.9 P69P).

# PLANT DISEASES - VIRAL

1140

## **Aberrant ratio revisited.**

Nelson, D.E. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular and Cellular Biology of Plant Stress," April 15-21, 1984, Keystone, Colorado. 1985. v. 22. p. 1-12. Includes references. (NAL Call No.: DNAL QH506.U34).

1141

## **Assembly, morphology, and accumulation of a Hawaiian isolate of maize mosaic virus in maize.**

PHYTAJ. McDaniel, L.L. Ammar, E.D.; Gordon, D.T. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Oct 1985. v. 75 (10). p. 1167-1172. ill. Includes 23 references. (NAL Call No.: DNAL 464.8 P56).

1142

**Biology of Peregrinus maidis with descriptions of immature stages (Homoptera: Delphacidae).** AESAAI. Tsai, J.H. Wilson, S.W. College Park, Md. : The Society. Annals of the Entomological Society of America. May 1986. v. 79 (3). p. 395-401. ill. Includes references. (NAL Call No.: DNAL 420 EN82).

1143

## **Breeding for and genetics of virus resistance in field corn.**

Scott, G.E. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 248-254. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1144

## **CIMMYT's maize improvement research program.**

Havener, R.D. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 3-11. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1145

## **Classification and prediction of maize dwarf mosaic intensity.**

Madden, L.V. Knoke, J.K.; Louie, R. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon

... et al. . p. 238-242. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1146

## **Comparison of inoculation with maize dwarf mosaic virus on the abaxial and adaxial leaf surfaces in corn.**

PHYTAJ. Rosenkranz, E. Scott, G.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1987. v. 77 (9). p. 1243-1246. Includes references. (NAL Call No.: DNAL 464.8 P56).

1147

## **Concentration of maize chlorotic mottle virus increased in mixed infections with maize dwarf mosaic virus, strain B.**

PHYTAJ. Goldberg, K.B. Brakke, M.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1987. v. 77 (2). p. 162-167. Includes references. (NAL Call No.: DNAL 464.8 P56).

1148

## **Corn lethal necrosis: disease symptoms, control, and epidemiology considerations.**

Uyemoto, J.K. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 141-143. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1149

## **Detection of virus infection and spread by immunofluorescent staining of enzyme treated leaves.**

PHYTAJ. Lei, J.D. Agrios, G.N. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Oct 1986. v. 76 (10). p. 1031-1033. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

1150

## **Developing virus resistant commercial maize hybrids.**

Eberhart, S.A. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 258-261. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

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1151

**Effects of genotype and inoculation protocols on resistance evaluation of maize to maize dwarf mosaic virus strains.**

PHYTAJ. Louie, R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1986. v. 76 (8). p. 769-773. Includes references. (NAL Call No.: DNAL 464.8 P56).

1152

**Identification of a new strain of maize dwarf mosaic virus.**

PLDRA. McDaniel, L.L. Gordon, D.T. St. Paul, Minn. : American Phytopathological Society. Plant disease. New strain of maize dwarf mosaic virus. July 1985. v. 69 (7). p. 602-607. ill. Includes 24 references. (NAL Call No.: DNAL 1.9 P69P).

1153

**Identification of maize mosaic virus by immunoelectron microscopy.**

EMSPA. Bradfute, O.E. San Francisco : San Francisco Press, Inc. Proceedings - meeting - Electron Microscopy Society of America. 1986. v. 44. p. 240-241. ill. Includes references. (NAL Call No.: DNAL QH201.E4).

1154

**Identification of single- and double-stranded RNAs associated with maize stripe virus.**

Falk, B.W. Tsai, J.H. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1984. v. 74 (8). p. 909-915. ill. Includes 23 references. (NAL Call No.: 464.8 P56).

1155

**Influence of maize dwarf mosaic virus infection on the sugar and sorbitol contents of sweet corn kernels.**

PLDRA. Carey, E.E. Mikel, M.A.; Dickinson, D.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Jan 1986. v. 70 (1). p. 36-37. Includes 7 references. (NAL Call No.: DNAL 1.9 P69P).

1156

**Insect vectors of maize dwarf mosaic virus and maize chlorotic dwarf virus.**

Knoke, J.K. Anderson, R.J.; Louie, R.; Madden, L.V.; Findley, W.R. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 130-138. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1157

**Integrating techniques of vector and weed-host suppression into control programs for maize virus diseases.**

All, J.N. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 243-247. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1158

**Interactions between maize mosaic and maize stripe viruses in their insect vector, *Peregrinus maidis*, and in maize.**

PHYTAJ. Ammar, E.D. Gingery, R.E.; Nault, L.R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1987. v. 77 (7). p. 1051-1056. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

1159

**Investigations of plant reaction to the maize dwarf mosaic virus.**

Loeffel, F.A. Johnson, E.M. Lexington : The Station. Progress report - Kentucky Agricultural Experiment Station. Documents available from Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091.~ Includes statistical data. Feb 1966. (160). 19 p. maps. (NAL Call No.: DNAL 100 K41PR).

1160

**Laboratory transmission of maize chlorotic mottle virus by three species of corn rootworms.**

PLDRA. Jensen, S.G. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1985. v. 69 (10). p. 864-868. Includes 15 references. (NAL Call No.: DNAL 1.9 P69P).

1161

**A List of references, maize virus and mycoplasma diseases.**

Wooster, Ohio : Maize Virus Information Service, Ohio Agricultural Research Development Center, 1981-. Title from cover.~ Each list is an addendum to the previous list. v. ; 28 cm. (NAL Call No.: DNAL Z5354.P3C58).

1162

**Longidorus breviannulatus as a vector for brome mosaic virus.**

JONEB. Huff, D.E. Davis, R.F.; Myers, R.F.  
Raleigh, N.C. : Society of Nematologists.  
Journal of nematology. Jan 1987. v. 19 (1). p.  
143-145. Includes references. (NAL Call No.:  
DNAL QL391.N4J62).

1163

**Maize chlorotic dwarf virus and its vector in sweet corn.**

AKFRA. Bona, R.L. Dale, J.L.; Mueller, A.J.  
Fayetteville, Ark. : The Station. Arkansas farm  
research - Arkansas Agricultural Experiment  
Station. July/Aug 1985. v. 34 (4). p. 5. (NAL  
Call No.: DNAL 100 AR42F).

1164

**Maize streak virus: effect of temperature on vector and virus.**

PHYTAJ. Damsteegt, V.D. St. Paul, Minn. :  
American Phytopathological Society.  
Phytopathology. Nov 1984. v. 74 (11). p.  
1317-1319. Includes 16 references. (NAL Call  
No.: DNAL 464.8 P56).

1165

**Maize stripe virus.**

Gingery, R.E. Wooster : Ohio Agricultural  
Research and Development Center, 1983.  
Proceedings : International Maize Virus Disease  
Colloquium and Workshop, Wooster, Ohio, August  
2-6, 1982 / edited by D.T. Gordon ... et al. .  
p. 69-74. ill. Includes references. (NAL Call  
No.: DNAL SB608.M2I55 1982).

1166

**Maize white line mosaic and maize subtle mosaic viruses.**

Louie, R. Knoke, J.K.; Gordon, D.T.; Gingery,  
R.E. Wooster : Ohio Agricultural Research and  
Development Center, 1983. Proceedings :  
International Maize Virus Disease Colloquium  
and Workshop, Wooster, Ohio, August 2-6, 1982 /  
edited by D.T. Gordon ... et al. . p. 139-140.  
Includes references. (NAL Call No.: DNAL  
SB608.M2I55 1982).

1167

**Mechanisms of resistance in corn to maize dwarf mosaic virus.**

PHYTAJ. Lei, J.D. Agrios, G.N. St. Paul, Minn.  
: American Phytopathological Society.  
Phytopathology. Oct 1986. v. 76 (10). p.  
1034-1040. Includes references. (NAL Call No.:  
DNAL 464.8 P56).

1168

**Meristematic tissues of maize plants are most susceptible to agroinfection with maize streak virus.**

Grimsley, N.H. Ramos, C.; Hein, T.; Hohn, B.  
New York, N.Y. : Nature Pub. Co.  
Bio/technology. Feb 1988. v. 6 (2). p. 185-189.  
ill. Includes references. (NAL Call No.: DNAL  
QH442.B5).

1169

**Mutations, the aberrant ratio phenomenon, and virus infection of maize.**

APPYA. Brakke, M.K. Palo Alto : Annual Reviews,  
Inc. Annual review of phytopathology.  
Literature review. 1984. v. 22. p. 77-94. ill.  
Includes 54 references. (NAL Call No.: DNAL  
464.8 AN72).

1170

**New hosts and taxonomic analysis of the Mississippi native species tested for reaction to maize dwarf mosaic and sugarcane mosaic viruses.**

PHYTAJ. Rosenkranz, E. St. Paul, Minn. :  
American Phytopathological Society.  
Phytopathology. Apr 1987. v. 77 (4). p.  
598-607. Includes references. (NAL Call No.:  
DNAL 464.8 P56).

1171

**Nonrandom spatial distribution of aphid-vectored maize dwarf mosaic.**

PLDRA. Scott, G.E. St. Paul, Minn. : American  
Phytopathological Society. Plant disease. Oct  
1985. v. 69 (10). p. 893-895. Includes  
references. (NAL Call No.: DNAL 1.9 P69P).

1172

**Origins of leafhopper vectors of maize pathogens in Mesoamerica.**

Nault, L.R. Wooster : Ohio Agricultural  
Research and Development Center, 1983.  
Proceedings : International Maize Virus Disease  
Colloquium and Workshop, Wooster, Ohio, August  
2-6, 1982 / edited by D.T. Gordon ... et al. .  
p. 75-82. ill., maps. Includes references. (NAL  
Call No.: DNAL SB608.M2I55 1982).

1173

**Performance of corn hybrids exposed to corn viruses in Ohio in 1984.**

OAASA. Findley, W.R. Knoke, J.K.; Louie, R.;  
Underwood, J.F. Wooster, The Center. Agronomy  
Department series - Ohio Agricultural Research  
and Development Center. Feb 1985. (213). 13 p.  
(NAL Call No.: DNAL 100 OH32).

## (PLANT DISEASES - VIRAL)

1174

**Performance of corn hybrids exposed to corn viruses in Ohio, 1986.**

DAASA. Jordan, D.M. Louie, R.; Knoke, J.K. Wooster : Ohio Agricultural Research and Development Center. Agronomy Department Series - Ohio Agricultural Research and Development Center, Department of Agronomy, Cooperative Extension Service. Jan 1987. (213). 6 p. (NAL Call No.: DNAL 100 DH32).

1175

**A possible function for thaumatin and a TMV-induced protein suggested by homology to a maize inhibitor.**

NATUAS. Richardson, M. Valdes-Rodriguez, S.; Blanco-Labra, A. Neptune, N.J. : Macmillan Journals. Nature. June 4/10, 1987. v. 327 (6121). p. 432-434. Includes references. (NAL Call No.: DNAL 472 N21).

1176

**Proceedings International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 /edited by D.T. Gordon ... et al. .**

--. Gordon, Donald Theile, 1935-. Wooster : Ohio Agricultural Research and Development Center, 1983. x, 261 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL SB608.M2I55 1982).

1177

**The productiveness of corn as influenced by the mosaic disease /by Hugo F. Stoneberg.**

Stoneberg, Hugo F. Washington : U.S. Dept. of Agriculture, 1927. Caption title. 19 p. : ill. 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.10).

1178

**Racial diversity in maize.**

Goodman, M.M. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 29-40. maps. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1179

**Reaction of hybrids and strains of corn to virus disease in Bracken and Lewis Counties Kentucky, 1964.**

Loeffel, F.A. Shane, J.F.; Johnson, E.M. Lexington : The Station. Progress report - Kentucky Agricultural Experiment Station. Documents available from Agriculture Library, Agricultural Science Center - North, University

of Kentucky, Lexington, Ky. 40546-0091.~ Includes statistical data. Jan 1965. (143). 7 p. (NAL Call No.: DNAL 100 K41PR).

1180

**Reactions of maize (Zea mays) accessions to maize rayado fino virus.**

PLDRA. Toler, R.W. Skinner, G.; Bockholt, A.J.; Harris, K.F. St. Paul, Minn. : American Phytopathological Society. Plant disease. Jan 1985. v. 69 (1). p. 56-57. Includes 11 references. (NAL Call No.: DNAL 1.9 P69P).

1181

**The role of USDA-Agricultural Research Service.**

Schertz, K.F. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 1-2. (NAL Call No.: DNAL SB608.M2I55 1982).

1182

**A satellitelike virus particle associated with maize white line mosaic virus.**

PHYTAJ. Gingery, R.E. Louie, R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1985. v. 75 (7). p. 870-874. ill. Includes 22 references. (NAL Call No.: DNAL 464.8 P56).

1183

**Serological and biochemical properties of the capsid and major noncapsid proteins of maize stripe, rice hoja blanca, and Echinochloa hoja blanca viruses.**

PHYTAJ. Falk, B.W. Morales, F.J.; Tsai, J.H.; Niessen, A.I. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1987. v. 77 (2). p. 196-201. ill. Includes references. (NAL Call No.: DNAL 464.8 P56).

1184

**Serological detection and evidence for multiplication of maize mosaic virus in the Planthopper, *Peregrinus maidis*.**

PHYTAJ. Falk, B.W. Tsai, J.H. St. Paul, Minn. : American Phytopathological Society. Phytopathology. July 1985. v. 75 (7). p. 852-855. Includes 21 references. (NAL Call No.: DNAL 464.8 P56).

1185

**Staphylococcus, paramyxovirus-like, rickettsia-like and other structures in *Peregrinus maidis* (Homoptera, Delphacidae).**  
JIVPA. Ammar, E.D. Nault, L.R.; Styer, W.E.; Saif, Y.M. Duluth, Minn. : Academic Press. Journal of invertebrate pathology. Mar 1987. v. 49 (2). p. 209-217. ill. Includes references. (NAL Call No.: DNAL 421 J826).

1186

**The taxonomy and evolution of *Tripsacum* and teosinte, the closest relatives of maize.**  
Doebley, J.F. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 15-28. ill., maps. Includes references. (NAL Call No.: DNAL SB608.M2155 1982).

1187

**Temporal and spatial analysis of maize dwarf mosaic epidemics.**  
PHYTAJ. Madden, L.V. Louie, R.; Knoke, J.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1987. v. 77 (2). p. 148-156. Includes references. (NAL Call No.: DNAL 464.8 P56).

1188

**Two types of inclusions in maize infected with maize stripe virus.**  
PHYTAJ. Ammar, E.D. Gingery, R.E.; Nault, L.R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Jan 1985. v. 75 (1). p. 84-89. ill. Includes 13 references. (NAL Call No.: DNAL 464.8 P56).

1189

**Type of gene action in the resistance to maize chlorotic dwarf virus in corn.**  
PHYTAJ. Rosenkranz, E. Scott, G.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1987. v. 77 (9). p. 1293-1296. Includes references. (NAL Call No.: DNAL 464.8 P56).

1190

**Use of a set of differential sorghum inbred lines to compare isolates of sugarcane mosaic virus from Sorghum and maize in nine countries.**  
PLDRA. Persley, D.M. Henzell, R.G.; Greber, R.S.; Teakle, D.S.; Toler, R.W. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1985. v. 69 (12). p. 1046-1049. Includes 26 references. (NAL Call No.: DNAL 1.9 P69P).

1191

**Variable reaction within corn inbreds to maize dwarf mosaic virus not genetically controlled.**  
CRPSAY. Scott, G.E. Rosenkranz, E. Madison, Wis. : Crop Science Society of America. Crop science. Jan/Feb 1987. v. 27 (1). p. 78-79. Includes references. (NAL Call No.: DNAL 64.8 C883).

1192

**Yield and ear quality of sweet corn hybrids grown under virus disease conditions, 1983.**  
AKARA. Dale, J.L. McFerran, J.; Wann, E.V. Fayetteville : The Station. Report series - Arkansas Agricultural Experiment Station. Oct 1983. (281). 7 p. Includes 3 references. (NAL Call No.: DNAL 100 AR42R).

1193

**Yield and ear quality of sweet corn hybrids grown under virus disease conditions, 1984.**  
AKARA. Dale, J.L. McFerran, J.; Wann, E.V. Fayetteville : The Station. Report series - Arkansas Agricultural Experiment Station. Oct 1984. (291). 5 p. Includes 6 references. (NAL Call No.: DNAL 100 AR42R).

1194

**Yield and ear quality of sweet corn hybrids grown under virus disease conditions, 1987.**  
Dale, J.L. McFerran, J.; Wann, E.V. Fayetteville : The Station. Research series - University of Arkansas Agricultural Experiment Station. Oct 1987. (362). 3 p. (NAL Call No.: DNAL S541.5.A8R47).

1195

**Yields of corn hybrids and ratings of inbreds tested under virus disease conditions in Arkansas in 1985.**  
Dale, J.L. York, J.D. Fayetteville : The Station. Research series - University of Arkansas Agricultural Experiment Station. Jan 1986. (329). 4 p. (NAL Call No.: DNAL S541.5.A8R47).

1196

**Yields of corn hybrids tested under virus disease conditions in Arkansas in 1984.**  
AKAMA. Dale, J.L. York, J.D. Fayetteville, Ark. : The Station. Mimeograph series - University of Arkansas Agricultural Experiment Station. Dec 1984. (320). 2 p. (NAL Call No.: DNAL 100 AR42M).

## **(PLANT DISEASES - VIRAL)**

**1197**

**Zea diploperennis as a source of maize chlorotic dwarf virus resistance: a progress report.**

Findley, W.R. Nault, L.R.; Styer, W.E.; Gordon, D.T. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 255-257. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

**1198**

**1983 virus tolerance ratings of maize genotypes grown in Missouri.**

Wallin, J.R. Darrah, L.L. Beltsville, Md. : The Service. ARS - United States Department of Agriculture, Agricultural Research Service. Sept 1985. (34). 8 p. (NAL Call No.: DNAL aS21.R44A7).

# PLANT DISEASES - PHYSIOLOGICAL

1199

**A comparative study of pith cell death in stalk internodes of corn grown on organic and conventional fields.**

Kang, M.S. Greenbelt : Institute for Alternative Agriculture. American journal of alternative agriculture. Fall 1986. v. 1 (4). p. 165-168. Includes references. (NAL Call No.: DNAL S605.5.A43).

1200

**Comparison of norflurazon absorption by excised roots of three plant species.**

PCBPB. Mersie, W. Singh, M. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. May 1987. v. 28 (1). p. 114-120. Includes references. (NAL Call No.: DNAL SB951.P49).

1201

**Corn hybrids evaluated for lodging in 1985.**

TFHSA. Graves, C.R. West, D.R.; Duck, B.; Thompson, R.; Freeland, R.; Bradley, J. Knoxville, Tenn. : The Station. Tennessee farm and home science - Tennessee Agricultural Experiment Station. Summer 1986. (139). p. 5-9. (NAL Call No.: DNAL 100 T25F).

1202

**Corn lodging prevention: keeping it from going down on the farm.**

CRSDA. Carter, P.R. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Mar 1985. v. 37 (6). p. 8-11. ill. (NAL Call No.: DNAL 6 W55).

1203

**Crop stress from wetness in undrained areas.**

Kanwar, R.S. Baker, J.L.; Melvin, S.W.; Mukhtar, S. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-2558). 27 p. maps. Includes references. (NAL Call No.: DNAL FICHE S-72).

1204

**Crop susceptibility factors and stress day index to relate crop response to excessive and deficit soil water.**

Evans, R.D. Skaggs, R.W.; Sneed, R.E. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-2053). 33 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1205

**Diagnosis and correction of manganese deficiency in corn.**

CSDSA2. Mascagni, H.J. Jr. Cox, F.R. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. Oct 1984. v. 15 (11). p. 1323-1333. Includes 13 references. (NAL Call No.: DNAL S590.C63).

1206

**Effect of corn, sugarbeets, and fallow on zinc availability to subsequent crops.**

SSSJD4. Leggett, G.E. Westermann, D.T. Madison, Wis. : The Society. Soil Science Society of America journal. July/Aug 1986. v. 50 (4). p. 963-968. Includes references. (NAL Call No.: DNAL 56.9 SD3).

1207

**Evaluation of an acid phosphatase assay for detection of phosphorus deficiency in leaves of maize (Zea mays L.).**

JPNUDS. Elliott, G.C. Lauchli, A. New York, N.Y. : Marcel Dekker. Journal of plant nutrition. 1986. v. 9 (11). p. 1469-1477. Includes references. (NAL Call No.: DNAL QK867.J67).

1208

**Look for nitrogen deficiency on corn now.**

Gerwing, J. Brookings, S.D. : The Department. Field facts : soils, insects, diseases, weeds, crops - South Dakota State University, Cooperative Extension, Plant Science Department. July 1, 1987. v. 2 (13). p. 1. (NAL Call No.: DNAL S596.7.F44).

## **(PLANT DISEASES - PHYSIOLOGICAL)**

1209

### **Peroxide coated seed emergence in water-saturated soil.**

AGJOAT. Langan, T.D. Pendleton, J.W.; Oplinger, E.S. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1986. v. 78 (5). p. 769-772. Includes references. (NAL Call No.: DNAL 4 AM34P).

1210

### **Phosphorus efficiency and phosphate-iron interaction in maize.**

AGJOAT. Elliott, G.C. Lauchli, A. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1985. v. 77 (3). p. 399-403. Includes references. (NAL Call No.: DNAL 4 AM34P).

1211

### **Purpling in maize hybrids as influenced by temperature and soil phosphorus.**

AGJOAT. Cobbina, J. Miller, M.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1987. v. 79 (3). p. 576-582. Includes references. (NAL Call No.: DNAL 4 AM34P).

1212

### **Relative phytotoxicity of dicyandiamide and availability of its nitrogen to cotton, corn, and grain sorghum.**

SSSJD4. Reeves, D.W. Touchton, J.T. Madison, Wis. : The Society. Soil Science Society of America journal. Sept/Oct 1986. v. 50 (5). p. 1353-1357. Includes references. (NAL Call No.: DNAL 56.9 S03).

1213

### **Reproduction at low silk and pollen water potentials in maize.**

CRPSAY. Westgate, M.E. Boyer, J.S. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 951-956. ill. Includes references. (NAL Call No.: DNAL 64.8 C883).

1214

### **Seedling growth and nutrition status in early sweet corn in relation to phosphorus and zinc under controlled low temperatures (Fertilizer rates, deficiency symptoms).**

Swiader, J.M. Gerber, J.M. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. July 1984. v. 109 (4). p. 535-539. Includes 24 references. (NAL Call No.: 81 S012).

1215

### **Zinc deficiency showing this year.**

Gerwing, J. Brookings, S.D. : The Department. Field facts : soils, insects, diseases, weeds, crops - South Dakota State University, Cooperative Extension, Plant Science Department. June 10, 1987. v. 2 (10). p. 1. (NAL Call No.: DNAL S596.7.F44).

# MISCELLANEOUS PLANT DISORDERS

1216

**Adh1 and Adh2: two genes involved in the maize anaerobic response.**  
Sachs, M.M. Ellis, D.J.; Finnegan, E.J.; Gerlach, W.L.; Llewellyn, D.; Peacock, W.J. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular and Cellular Biology of Plant Stress," April 15-21, 1984, Keystone, Colorado. 1985. v. 22. p. 217-226. Includes references. (NAL Call No.: DNAL QH506.U34).

1217

**Agricultural drought assessments using a crop model.** --.  
Arkin, Gerald Franklin, 1942-. Dugas, William A.; Ainsworth, C. G. Temple, Tex. : Blackland Research Center ; Springfield, Va. : Available from the N.T.I.S., 1983 . Final report, cooperative agreement no. 1-07-81-V0159, Cooperative evaluation and improvement of crop growth and development models.~ "G.F. Arkin and W.A. Dugas ... were co-principal investigators and C.G. Ainsworth was the research associate"--Preface.~ Sponsoring agency: Bureau of Reclamation, Engineering and Research Center.~ "July 1983.". iv, 154 p. : ill., maps ; 28 cm. Bibliography: p. 55-59. (NAL Call No.: DNAL QC929.D8A74).

1218

**Agronomic features of two maize synthetics selected for high and low stalk-crushing strength.**  
CRPSAY. Berzonsky, W.A. Hawk, J.A. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 871-875. Includes references. (NAL Call No.: DNAL 64.8 C883).

1219

**Allelopathic effect of parthenium (Parthenium hysterophorus L.) extract and residue on some agronomic crops and weeds.**  
JCECD. Mersie, W. Singh, M. New York, N.Y. : Plenum Press. Journal of chemical ecology. July 1987. v. 13 (7). p. 1739-1747. Includes references. (NAL Call No.: DNAL QD415.A1U6).

1220

**Alleviation of imbibitional chilling injury by use of lanolin.**  
CRPSAY. Priestley, D.A. Leopold, A.C. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1986. v. 26 (6). p. 1252-1254. Includes references. (NAL Call No.: DNAL 64.8 C883).

1221

**Auxinlike activity and metabolism of mefluidide in corn (Zea mays) and soybean (Glycine max) tissue.**  
WEESA6. Glenn, S. Rieck, C.E. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 452-456. Includes 20 references. (NAL Call No.: DNAL 79.8 W41).

1222

**The binding of host-selective toxin analogs to mitochondria from normal and 'Texas' male sterile cytoplasm maize.**  
PLPHA. Frantzen, K.A. Daly, J.M.; Knoche, H.W. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1987. v. 83 (4). p. 863-868. Includes references. (NAL Call No.: DNAL 450 P692).

1223

**Cadmium levels in soils and plants from some long-term soil fertility experiments in the United States of America.**  
JEVQAA. Mortvedt, J.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1987. v. 16 (2). p. 137-142. Includes references. (NAL Call No.: DNAL QH540.U6).

1224

**Characterization of the mode of action of the experimental herbicide LS 82-556 (S)-3-N-(Methylbenzyl)carbamoyl-5-propionyl-2,6-lutidine .**  
PCBPB. Matringe, M. Dufour, J.L.; Lherminier, J.; Scalla, R. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Oct 1986. v. 26 (2). p. 150-159. ill. Includes references. (NAL Call No.: DNAL SB951.P49).

1225

**Chemical and in vitro digestible dry matter composition of maize stalks after selection for stalk strength and stalk-rot resistance.**  
CRPSAY. Albrecht, K.A. Martin, M.J.; Russell, W.A.; Wedin, W.F.; Buxton, D.R. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1986. v. 26 (5). p. 1051-1055. Includes references. (NAL Call No.: DNAL 64.8 C883).

1226

**Chloride effects on corn.**  
CSDSA2. Parker, M.B. Gaines, T.P.; Gascho, G.J. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. Dec 1985. v. 16 (12). p. 1319-1333. Includes 20 references. (NAL Call No.: DNAL S590.C63).

## (MISCELLANEOUS PLANT DISORDERS)

1227

**Cold tolerance in corn hybrids as affected by tillage systems and planting dates.**  
PIAIA. Funnemark, W.L. Hallauer, A.R. Cedar Falls, Iowa : The Academy. The Proceedings of the Iowa Academy of Science. Mar 1985. v. 92 (2). p. 58-62. Includes references. (NAL Call No.: DNAL 500 I093).

1228

**Corn kernel damage during on-farm handling.**  
TAAEA. Pierce, R.O. Hanna, M.A. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Jan/Feb 1985. v. 28 (1). p. 239-241, 245. Includes references. (NAL Call No.: DNAL 290.9 AM32T).

1229

**Corn yield potential following alachlor and metolachlor treatments.**  
PNWSB. Hartwig, N.L. Fleet, W.C. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 32-35. (NAL Call No.: DNAL 79.9 N814).

1230

**Corn (Zea mays) yield in relationship to johnsongrass (Sorghum halepense) population.**  
WEESA6. Bendixen, L.E. Champaign, Ill. : Weed Science Society of America. Weed science. May 1986. v. 34 (3). p. 449-451. Includes references. (NAL Call No.: DNAL 79.8 W41).

1231

**Crop-hail damage in the Midwest Corn Belt.**  
JAMOA. Hillaker, H.J. Jr. Waite, P.J. Boston : American Meteorological Society. Journal of applied meteorology. Jan 1985. v. 24 (1). p. 3-15. maps. Includes references. (NAL Call No.: DNAL QC851.J6).

1232

**Damage to corn from pneumatic conveying /by Do Sup Chung, Chang Joo Chung, and Harry H. Converse.**  
Chung, Do Sup. Chung, Chang Joo.; Converse, Harry H. Peoria, Ill. : North Central Region, Agricultural Research Service, U.S. Dept. of Agriculture, 1973. "January 1973.". 9 p. : ill. ; 26 cm. Bibliography: p. 9. (NAL Call No.: DNAL aS21.A75U44 no.5).

1233

**Determination of crop production loss due to inadequate drainage in a large watershed (Maize, soybeans, Iowa, Des Moines River basin).**  
Kanwar, R.S. Johnson, H.P.; Fenton, T.E. Minneapolis, Minn. : American Water Resources Association. Water resources bulletin. Aug 1984. v. 20 (4). p. 589-597. maps. Includes 9 references. (NAL Call No.: 292.9 AM34).

1234

**The effect of additives on the activity of sethoxydim.**  
Lourens, A.F. Lange, A.H. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 210. (NAL Call No.: DNAL 79.9 W52R).

1235

**The effect of CDAA (N,N,-diallyl-2-chloroacetamide) pretreatments on subsequent CDAA injury to corn (Zea mays L.).**  
PCBPB. Ezra, G. Rusness, D.G.; Lamoureux, G.L.; Stephenson, G.R. New York, N.Y. : Academic Press. Pesticide biochemistry and physiology. Feb 1985. v. 23 (1). p. 108-115. ill. Includes 25 references. (NAL Call No.: DNAL SB951.P49).

1236

**Effect of deficit irrigation on yield and quality of sweet corn.**  
JDSHB. Braunworth, W.S. Jr. Mack, H.J. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Jan 1987. v. 112 (1). p. 32-35. Includes 18 references. (NAL Call No.: DNAL 81 S012).

1237

**Effect of FMC-57020 on plant growth and pigment synthesis.**  
PNWSB. Devlin, R.M. Koszanski, Z.K. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 95-99. Includes references. (NAL Call No.: DNAL 79.9 N814).

1238

**Effect of haloxyfop and haloxyfop-methyl on elongation and respiration of corn (Zea mays) and soybean (Glycine max) roots.**  
WEESA6. Gronwald, J.W. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 196-202. ill. Includes 22 references. (NAL Call No.: DNAL 79.8 W41).

1239

**The effect of injury in imitation of hail damage on the development of the corn plant /by John C. Eldredge.**

Eldredge, John C. 1886-. Ames, Iowa : Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1935. 61 p. : ill., charts ; 22 cm. Bibliography: p. 58-61. (NAL Call No.: DNAL 100 Io9 no.185).

1240

**Effect of sethoxydim on pigment synthesis and enzyme activity in plants.**

PNWSB. Devlin, R.M. Karczmarczyk, S.J.; Zbiec, I.I. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1985. v. 39. p. 106-111. Includes 11 references. (NAL Call No.: DNAL 79.9 N814).

1241

**Effect of soil pH on imazaquin and imazethapyr adsorption to soil and phytotoxicity to corn (Zea mays).**

WEESA6. Renner, K.A. Meggitt, W.F.; Penner, D. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1988. v. 36 (1). p. 78-83. Includes references. (NAL Call No.: DNAL 79.8 W41).

1242

**Effect of some s-triazine herbicides on phosphatases from corn (Zea mays) roots.**

WEESA6. Scarponi, L. Perucci, P. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1986. v. 34 (6). p. 807-810. Includes references. (NAL Call No.: DNAL 79.8 W41).

1243

**Effects of acid rain on corn silks and pollen germination.**

JEVQAA. Wertheim, F.S. Craker, L.E. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1988. v. 17 (1). p. 135-138. Includes references. (NAL Call No.: DNAL QH540.J6).

1244

**Effects of fresh and decomposing corn plant residue extracts on corn seedling development (Phytotoxic chemicals, leaching, Zea mays).**

Yakle, G.A. Cruse, R.M. Madison, Wis. : The Society. Journal - Soil Science Society of America. Sept/Oct 1984. v. 48 (5). p. 1143-1146. ill. Includes 16 references. (NAL Call No.: 56.9 S03).

1245

**Effects of haloxyfop on corn (Zea mays) and soybean (Glycine max) cell suspension cultures.** WEESA6. Cho, H.Y. Widholm, J.M.; Slife, F.W. Champaign, Ill. : Weed Science Society of America. Weed science. July 1986. v. 34 (4). p. 496-501. Includes 15 references. (NAL Call No.: DNAL 79.8 W41).

1246

**Effects of methomyl and Helminthosporium maydis toxin on matrix volume, proton motive force, and NAD accumulation in maize (Zea mays L.) mitochondria.**

PLPHA. Berville, A. Ghazi, A.; Charbonnier, M.; Bonavent, J.F. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Oct 1984. v. 76 (2). p. 508-517. ill. Includes 36 references. (NAL Call No.: DNAL 450 P692).

1247

**Effects of sublethal concentrations of bentazon, fluazifop, haloxyfop, and sethoxydim on corn (Zea mays).**

WEESA6. Chernicky, J.P. Slife, F.W. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 171-174. Includes 14 references. (NAL Call No.: DNAL 79.8 W41).

1248

**Effects of three weed residues on weed and crop growth.**

WEESA6. Johnson, W.C. III. Coble, H.D. Champaign, Ill. : Weed Science Society of America. Weed science. May 1986. v. 34 (3). p. 403-408. Includes references. (NAL Call No.: DNAL 79.8 W41).

1249

**Evidence for the interaction of an imidazolinone herbicide with leucine, valine, and isoleucine metabolism.**

WEESA6. Anderson, P.C. Hibberd, K.A. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 479-483. ill. Includes 13 references. (NAL Call No.: DNAL 79.8 W41).

1250

**Factors influencing lodging in corn /by Benjamin Koehler, G.H. Dungan, and J.R. Holbert.**

Koehler, Benjamin, 1890-. Dungan, George Harlan, 1887-; Holbert, James R. 1890-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, in cooperation with Office

## (MISCELLANEOUS PLANT DISORDERS)

of Cereal Investigations, Bureau of Plant Industry, U.S. Dept. of Agriculture, 1925. Cover title. p. 309 -371 : ill. ; 23 cm. Bibliography: p. 371. (NAL Call No.: DNAL 100 I16S no.266).

1251

**Frost damage: how to salvage injured corn.**  
CRSOA. Carter, P.R. Hesterman, O.B. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Aug/Sept 1987. v. 39 (9). p. 19-21. ill. (NAL Call No.: DNAL 6 W55).

1252

**Image processing for stress cracks in corn kernels.**  
Gunasekaran, S. Cooper, T.M.; Krishnan, P. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-3034). 15 p. ill. Includes references. (NAL Call No.: DNAL FICHE S-72).

1253

**In vivo <sup>31</sup>P NMR studies of corn root tissue and its uptake of toxic metals.**  
PLPHA. Pfeffer, P.E. Tu, S.I.; Gerasimowicz, W.V.; Cavanaugh, J.R. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Jan 1985. v. 80 (1). p. 77-84. Includes 37 references. (NAL Call No.: DNAL 450 P692).

1254

**Influence of ammonia vapors on the dry seeds of soybean, corn, and peanut.**  
CRPSAY. Woodstock, L.W. Tsao, H. Madison, Wis. : Crop Science Society of America. Crop science. May/June 1986. v. 26 (3). p. 631-634. Includes references. (NAL Call No.: DNAL 64.8 C883).

1255

**Influence of soil compaction on trifluralin phytotoxicity to corn.**  
AGJ0AT. Martin, A.G. Jordan, T.N.; Steinhardt, G.C. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1985. v. 77 (3). p. 481-483. Includes 12 references. (NAL Call No.: DNAL 4 AM34P).

1256

**Inhibition of velvetleaf (*Abutilon theophrasti*) germination and growth by benzyl isothiocyanate, a natural toxicant (Maize, soybeans).**  
Wolf, R.B. Spencer, G.F.; Kwolek, W.F. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1984. v. 32 (5). p. 612-615. ill. Includes 19 references. (NAL Call No.: 79.8 W41).

1257

**Inhibitory effect of pseudobactin on the uptake of iron by higher plants.**  
APMBA. Becker, J.O. Hedges, R.W.; Messens, E. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. May 1985. v. 49 (5). p. 1090-1093. ill. Includes 25 references. (NAL Call No.: DNAL 448.3 AP5).

1258

**Inquiry concerning number of barren stalks in Illinois corn fields.**  
Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1901. Caption title. 3 p. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.33).

1259

**Inquiry concerning number of barren stalks in Illinois corn fields /A.D. Shamel.**  
Shamel, A. D. 1878-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1902. Caption title. 3 p. ; 23 cm. (NAL Call No.: DNAL 275.29 IL62C no.57).

1260

**L-2-Oxothiazolidine-r-carboxylic acid protection against tridiphane toxicity.**  
WEESA6. Hilton, J.L. Pillai, P. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1986. v. 34 (5). p. 669-675. Includes references. (NAL Call No.: DNAL 79.8 W41).

1261

**Metal accumulation in corn and barley grown on a sludge-amended Typic Ochraqualf.**  
JEVQAA. Rappaport, B.D. Martens, D.C.; Reneau, R.B. Jr.; Simpson, T.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1987. v. 16 (1). p. 29-33. Includes references. (NAL Call No.: DNAL QH540.J6).

1262

**Metal availability in sludge-amended soils with elevated metal levels.**

JEVQAA. Rappaport, B.D. Martens, D.C.; Reneau, R.B. Jr.; Simpson, T.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1988. v. 17 (1). p. 42-47. Includes references. (NAL Call No.: DNAL QH540.U6).

1263

**Morphological and anatomical characterization of leaf burn in corn induced from foliar-applied nitrogen.**

AGJDAT. Gamble, P.E. Emino, E.R. Madison, Wis. : American Society of Agronomy. Agronomy journal. Jan/Feb 1987. v. 79 (1). p. 92-96. ill. Includes references. (NAL Call No.: DNAL 4 AM34P).

1264

**Morphological and histological effects of sethoxydim on corn (Zea mays) seedlings.**

WEESA6. Hosaka, H. Inaba, H.; Satoh, A.; Ishikawa, H. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1984. v. 32 (6). p. 711-721. ill. Includes 8 references. (NAL Call No.: DNAL 79.8 W41).

1265

**Mutagen testing with maize.**

Plewa, M.J. New York : Plenum Press, c1985. Basic and applied mutagenesis : with special reference to agricultural chemicals in developing countries / edit. by Amir Muhammed and R.C. von Borstel : technic. editor, Dorothy Woslyns. Paper presented at the "Symposium on Agricultural Genotoxicity in Developing Countries", October 31-November 5, 1982, Islamabad, Pakistan. p. 323-328. (NAL Call No.: DNAL RA1270.A4B37).

1266

**Physiological responses to fluazifop-butyl in tissue of corn (Zea mays) and soybean (Glycine max).**

WEESA6. Peregoy, R.S. Glenn, S. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 443-446. Includes 25 references. (NAL Call No.: DNAL 79.8 W41).

1267

**Phytotoxicity and adsorption of chlorsulfuron as affected by soil properties.**

WEESA6. Mersie, W. Foy, C.L. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 564-568. Includes 21 references. (NAL Call No.: DNAL 79.8 W41).

1268

**Plant genetic assays to evaluate complex environmental mixtures.**

EVSRB. Plewa, M.J. New York : Plenum Press. Environmental science research. Paper presented at the "Symposium on Short-Term Genetic Bioassays in the Evaluation of Complex Environmental Mixtures," 1984, Chapel Hill, North Carolina. 1985. v. 32. p. 45-64. ill. Includes references. (NAL Call No.: DNAL TD172.E55).

1269

**R-25788 as an antidote for SC-0774 in corn.**

PNWSB. Devlin, R.M. Koszanski, Z.K. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 74-77. Includes references. (NAL Call No.: DNAL 79.9 N814).

1270

**R-25788 effects on chlorsulfuron injury and acetohydroxyacid synthase activity.**

WEESA6. Rubin, B. Casida, J.E. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 462-468. Includes 24 references. (NAL Call No.: DNAL 79.8 W41).

1271

**The relative phytotoxicity of selected hydrocarbon and oxygenated solvents and oils.**

Krenek, M.R. King, D.N. Philadelphia, PA : ASTM, c1987. Pesticide formulations and application systems : sixth volume : a symposium sponsored by ASTM Committee E-35 on Pesticides, Bal Harbour, FL, 6-7 Nov. 1985 / David I.B. Vander Hooven, Larry D. Spicer, editors. p. 3-19. Includes references. (NAL Call No.: DNAL SB950.93.P47 1987).

1272

**Researching Treflan carryover.**

Lueschen, W.E. St. Paul : University of Minnesota, Office of Special Programs, 1983. Soils, Fertilizer and Agricultural Pesticides Short Course : proceedings : December 13-14, 1983 / presented by the University of Minnesota Institute of Agriculture, Forestry and Home Economics ... et al. . p. 86-91. (NAL Call

## (MISCELLANEOUS PLANT DISORDERS)

No.: DNAL S631.3.S65 1983).

1273

### **Semi-automatic survey of crop damage using color infrared photography.**

PERSD. Ladouceur, G. Allard, R.; Ghosh, S. Falls Church, Va. : American Society of Photogrammetry and Remote Sensing. Photogrammetric engineering and remote sensing. Jan 1986. v. 52 (1). p. 111-115. ill. Includes references. (NAL Call No.: DNAL 325.28 P56).

1274

### **Simulated acid rain effects on yield response of two corn cultivars.**

AGJDAT. Banwart, W.L. Porter, P.M.; Hassett, J.J.; Walker, W.M. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1987. v. 79 (3). p. 497-501. Includes references. (NAL Call No.: DNAL 4 AM34P).

1275

### **A soil primer: compaction causes and effects.**

CRSDA. Voorhees, W.B. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Dec 1986. v. 40 (3). p. 8-9. (NAL Call No.: DNAL 6 W55).

1276

### **Some physiological effects of AC-252,214 on several plant growth systems.**

PNWSB. Devlin, R.M. Koszanski, Z.K. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1986. v. 40. p. 99-103. Includes references. (NAL Call No.: DNAL 79.9 N814).

1277

### **Stalk lodging in corn: guidelines for preventive management.**

Nielsen, B. Colville, D. West Lafayette, Ind. : The Service. AY - Purdue University Cooperative Extension Service. Dec 1986. (262). 4 p. (NAL Call No.: DNAL S544.3.I6P82).

1278

### **Standardizing corn breakage susceptibility testing.**

Gunasekaran, S. Paulsen, M.R. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085.

Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-3035). 19 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1279

### **Structure and expression of maize hsp 70 gene.**

Shah, D.M. Rochester, D.E.; Krivi, G.G.; Hironaka, C.M.; Mozer, T.J.; Fraley, R.T.; Tiemeier, D.C. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular and Cellular Biology of Plant Stress," April 15-21, 1984, Keystone, Colorado. 1985. v. 22. p. 181-200. ill. Includes references. (NAL Call No.: DNAL QH506.U34).

1280

### **S1-line recurrent selection for cold tolerance in two maize populations.**

CRPSAY. Hoard, K.G. Crosbie, T.M. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1985. v. 25 (6). p. 1041-1045. Includes references. (NAL Call No.: DNAL 64.8 C883).

1281

### **Xanthomonas campestris pv. translucens strains active in ice nucleation.**

PLDIDE. Kim, H.K. Orser, C.; Lindow, S.E.; Sands, D.C. St. Paul, Minn. : American Phytopathological Society. Plant disease. Nov 1987. v. 71 (11). p. 994-997. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1282

### **Yield loss due to simulated hail damage on corn: a comparison of actual and predicted values.**

AGJDAT. Shapiro, C.A. Peterson, T.A.; Flowerday, A.D. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1986. v. 78 (4). p. 585-589. Includes references. (NAL Call No.: DNAL 4 AM34P).

# PROTECTION OF PLANT PRODUCTS - GENERAL AND MISC.

1283

**Aflatoxin detection and determination in corn.**  
SCSBA. Shotwell, O.L. Mississippi State :  
Mississippi Agricultural and Forestry  
Experiment Station. Southern cooperative series  
bulletin. Feb 1983. (279). p. 38-45. (NAL Call  
No.: DNAL 100 G29S0).

1284

**Aflatoxin testing procedures for corn.**  
SCSBA. Dickens, J.W. Whitaker, T.B. Mississippi  
State : Mississippi Agricultural and Forestry  
Experiment Station. Southern cooperative series  
bulletin. Feb 1983. (279). p. 35-37. (NAL Call  
No.: DNAL 100 G29S0).

1285

**Breakage resistance of corn as a function of  
drying rates.**  
Gunasekaran, S. Paulsen, M.R. St. Joseph, Mich.  
: The Society. Paper - American Society of  
Agricultural Engineers (Microfiche collection).  
Paper presented at the 1985 Summer Meeting of  
the American Society of Agricultural Engineers.  
Available for purchase from: The American  
Society of Agricultural Engineers, Order Dept.,  
2950 Niles Road, Summer 1985. (fiche no.  
85-3024). 22 p. ill. Includes references. (NAL  
Call No.: DNAL FICHE 290.9 AM32P).

1286

**Characteristics, handling, processing, of corn  
of various size and shape.**  
Martin, C.R. Converse, H.H.; Czuchajowska, Z.;  
Lai, F.S.; Pameranz, Y. St. Joseph, Mich. : The  
Society. Paper - American Society of  
Agricultural Engineers (Microfiche collection).  
Paper presented at the 1984 Winter Meeting of  
the American Society of Agricultural Engineers.  
Available for purchase from: The American  
Society of Agricultural Engineers, Order Dept.,  
2950 Niles Road, Winter 1984. (84-3600). 30 p.  
(NAL Call No.: DNAL FICHE 290.9 AM32P).

1287

**Clean grain payoff: sell all you store.**  
Seim, D. Philadelphia : The Journal. Farm  
journal. Aug 1987. v. 111 (10). p. 22-23. ill.  
(NAL Call No.: DNAL 6 F2212).

1288

**Control or suppression of aflatoxin production  
with pesticides.**  
SCSBA. Draughon, F.A. Mississippi State :  
Mississippi Agricultural and Forestry  
Experiment Station. Southern cooperative series  
bulletin. Feb 1983. (279). p. 81-86. (NAL Call  
No.: DNAL 100 G29S0).

1289

**Corn moisture measurement accuracy.**  
TAAEA. Hurburgh, C.R. Jr. Hazen, T.E.; Bern,  
C.J. St. Joseph, Mich. : The Society.  
Transactions of the ASAE - American Society of  
Agricultural Engineers. Mar/Apr 1985. v. 28  
(2). p. 634-640. Includes references. (NAL Call  
No.: DNAL 290.9 AM32T).

1290

**Detoxification of aflatoxin-contaminated corn.**  
SCSBA. Anderson, R.A. Mississippi State :  
Mississippi Agricultural and Forestry  
Experiment Station. Southern cooperative series  
bulletin. Feb 1983. (279). p. 87-90. (NAL Call  
No.: DNAL 100 G29S0).

1291

**Effect of physical damage to corn kernels on  
the development of *Penicillium* species and  
*Aspergillus glaucus* in storage.**  
PHYTA. Tuite, J. Koh-Knox, C.; Stroshine, R.;  
Cantone, F.A.; Bauman, L.F. St. Paul, Minn. :  
American Phytopathological Society.  
Phytopathology. Oct 1985. v. 75 (10). p.  
1137-1140. Includes 15 references. (NAL Call  
No.: DNAL 464.8 P56).

1292

**Effect of storage on yields of farm seed  
treated for disease control wheat, oats,  
barley, corn /by Benjamin Koehler.**  
Koehler, Benjamin, 1890-. Urbana, Ill. :  
University of Illinois Agricultural Experiment  
Station, 1941. Cover title. p. 257-276 : ill.  
; 23 cm. Includes bibliographical references.  
(NAL Call No.: DNAL 100 I16S no.476).

1293

**Factors affecting the response of the maize  
weevil, *Sitophilus zeamais* (Coleoptera:  
Curculionidae), to its aggregation pheromone.**  
EVETEX. Walgenbach, C.A. Burkholder, W.E.  
College Park, Md. : Entomological Society of  
America. Environmental entomology. June 1986.  
v. 15 (3). p. 733-738. Includes references.  
(NAL Call No.: DNAL QL461.E532).

1294

**Fungal populations in U.S. farm-stored grain  
and their relationship to moisture, storage  
time, regions, and insect infestation  
(*Aspergillus glaucus*, oats, wheat, maize).**  
Sauer, D.B. Storey, C.L.; Walker, D.E. St.  
Paul, Minn. : American Phytopathological  
Society. Phytopathology. Sept 1984. v. 74 (9).  
p. 1050-1053. maps. Includes 13 references.  
(NAL Call No.: 464.8 P56).

(PROTECTION OF PLANT PRODUCTS - GENERAL AND MISC.)

1295

**Grain damage in handling--an overview.**

McKenzie, B.A. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-3510). 11 p. Includes references. (NAL Call No.: ONAL FICHE S-72).

1296

**Guidelines for mold control in high-moisture corn /prepared by Agricultural Engineering Research Division, Agricultural Research Service.**

Washington, D.C. : U.S. Dept. of Agriculture, 1969. Originally issued Sept. 1968. 16 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84F no.2238 1969).

1297

**Influence of ammonia vapors on the dry seeds of soybean, corn, and peanut.**

CRPSAY, Woodstock, L.W. Tsao, H. Madison, Wis. : Crop Science Society of America. Crop science. May/June 1986. v. 26 (3). p. 631-634. Includes references. (NAL Call No.: ONAL 64.8 C883).

1298

**Inhibition of Aspergillus flavus growth by fractions of salt-extracted proteins from maize kernel.**

JAFCAU. Neucere, J.N. Zeringue, H.J. Jr. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Sept/Oct 1987. v. 35 (5). p. 806-808. ill. Includes references. (NAL Call No.: ONAL 381 J8223).

1299

**Interactions between maize weevil (Coleoptera: Curculionidae) infestations and infection by Aspergillus flavus and other fungi in stored corn.**

JESCEP. Dix, D.E. All, J.N. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. Apr 1987. v. 22 (2). p. 108-118. Includes references. (NAL Call No.: DNAL QL461.G4).

1300

**Kinetics of sulfite reaction in corn grain.**

JAFCAU. Eckhoff, S.R. Okos, M.R. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Mar/Apr 1986. v. 34 (2). p. 239-245. Includes references. (NAL Call No.: ONAL 381 J8223).

1301

**A laser optical method for detecting corn kernel defects.**

Gunasekaran, S. Paulsen, M.R.; Shove, G.C. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1984 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, Winter 1984. (84-3552). 17 p. ill. (NAL Call No.: ONAL FICHE 290.9 AM32P).

1302

**Potential methods for automatic detection of corn kernel defects.**

Gunasekaran, S. Paulsen, M.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1984 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, Winter 1984. (84-3558). 11 p. ill. (NAL Call No.: DNAL FICHE 290.9 AM32P).

1303

**Preservation of corn silage sugars with sulfur dioxide.**

TAAEA. Smith, R.O. Peart, R.M.; Eckhoff, S.R.; Okos, M.R. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1985. v. 28 (5). p. 1650-1656. Includes references. (NAL Call No.: ONAL 290.9 AM32T).

1304

**Shelled damage using drag-type conveyors.**

Converse, H.H. Johnson, R.S.; Chung, D.S.; Chang, C.S. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, Summer 1985. (fiche no. 85-3007). 30 p. ill. Includes references. (NAL Call No.: DNAL FICHE 290.9 AM32P).

(PROTECTION OF PLANT PRODUCTS - GENERAL AND MISC.)

1305

**Size characterization of stress cracks in corn kernels.**

TAAEA. Gunasekaran, S. Deshpande, S.S.; Paulsen, M.R.; Shove, G.C. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1985. v. 28 (5). p. 1668-1672. ill. Includes references. (NAL Call No.: DNAL 290.9 AM32T).

1306

**Sulfur dioxide as a mycocidal adjunct for low temperature grain drying (Corn, Zea mays).**

Eckhoff, S.R. Tuite, J.; Foster, G.H.; Okos, M.R.; Anderson, R.A. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3516). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1307

**What's the best moisture for corn and soybeans?.**

Hill, L. Morrison, D.; Tuite, J. Urbana, Ill. : The Department. A.E. - University of Illinois, Department of Agricultural Economics. Dec 1982. (4548). p. 15-18. (NAL Call No.: DNAL AGE 275.29 IL62P).

# PROTECTION OF PLANT PRODUCTS - INSECTS

1308

**Attraction of *Sitophilus Oryzae* (L.) and *S. zeamais* Motsch. (Coleoptera: Curculionidae) to extracts from two corn genotypes.**  
JKESA. Tipping, P.W. Mikolajczak, K.L.; Rodriguez, J.G.; Zilkowski, B.W.; Legg, D.E. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1986. v. 59 (1). p. 190-194. ill. Includes references. (NAL Call No.: DNAL 420 K13).

1309

**Bacillus thuringiensis applied to stored corn using grain drying fans.**  
JKESA. McGaughey, W.H. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Apr 1986. v. 59 (2). p. 350-355. Includes references. (NAL Call No.: DNAL 420 K13).

1310

**Bioenergetics of *Cynaues angustus* (Coleoptera: Tenebrionidae) feeding on stored corn.**  
AESAAI. White, N.D.G. Sinha, R.N. College Park, Md. : The Society. Annals of the Entomological Society of America. Mar 1987. v. 80 (2). p. 184-190. Includes references. (NAL Call No.: DNAL 420 EN82).

1311

**Bioenergetics of the Indianmeal moth, *Plodia interpunctella* (Lepidoptera: Pyralidae).**  
AESAAI. Imura, O. Sinha, R.N. College Park, Md. : The Society. Annals of the Entomological Society of America. Jan 1986. v. 79 (1). p. 91-95. ill. Includes references. (NAL Call No.: DNAL 420 EN82).

1312

**Control of insects in stored grain.**  
Rodriguez, J.D. Price, W.A. Lexington : The Station. Progress report - Kentucky Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, Lexington, Ky. 40546-0091. Jan 1953. (6). 2 p. (NAL Call No.: DNAL 100 K41PR).

1313

**Controlling earworms on sweet corn /by Norman Gannon, W.H. Luckmann and H.B. Petty.**  
Gannon, Norman. Luckman, W. H.; Petty, H. B. Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1955. Cover title.~ In cooperation with Illinois State Natural History Survey. 4 p. : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.739).

1314

**Cornstalk rots in Illinois /by Benjamin Koehler.**  
Koehler, Benjamin, 1890-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1960. Cover title. 90 p. : ill. ; 23 cm. Bibliography: p. 85-90. (NAL Call No.: DNAL 100 I16S no.658).

1315

**Design and analysis of competition experiments in stored-product entomology.**  
Smith, R.H. Howard, D.C. Manhattan : Kansas State University, 1984. Proceedings of the Third International Working Conference on Stored-Product Entomology : Oct 23-28, 1983, Kansas State Univ., Manhattan, Kansas / spon. Dept. of Entomology and Dept. of Grain Science a. p. 54-67. Includes references. (NAL Call No.: DNAL SB937.I5 1983).

1316

**Disinfestation of maize by irradiation.**  
Adem Chahin, E. Uribe Rendon, R.M.; Piedad Benitez, de la, A.; Reyes Lujan, J. Elmsford, N.Y. : Pergamon, c1977. Radiation processing : transactions of a conference / jointly sponsored by American Chemical Society and Society of Plastics Engineers, Dorado Beach, Puerto Rico, 9-13 May 1976 ; eds. J. Silverman and. p. 763-768. ill. Includes 2 references. (NAL Call No.: DNAL TP249.I58 1976).

1317

**Effect of infestation by the larger grain borer, *Prostephanus truncatus* (Horn), and the lesser grain borer, *Rhyzopertha dominica* (F.) (Coleoptera: Bostrichidae), on stored corn.**  
EVETEX. Demianyk, C.U. Sinha, R.N. College Park, Md. : Entomological Society of America. Environmental entomology. June 1987. v. 16 (3). p. 618-624. Includes references. (NAL Call No.: DNAL QL461.E532).

1318

**Effects of whole corn kernels and extracts on behavior of maize weevil (Coleoptera: Curculionidae).**  
JEENAI. Tipping, P.W. Mikolajczak, K.L.; Rodriguez, J.G.; Poneleit, C.G.; Legg, D.E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1987. v. 80 (5). p. 1010-1013. Includes references. (NAL Call No.: DNAL 421 J822).

1319

Efficacy of perforated tubing in assisting phosphine distribution for in-transit fumigation of export corn (Control method for stored-product insects, *Sitophilus zeamais*, *Rhyzopertha dominica*, *Tribolium confusum*). Zettler, J.L. Gillenwater, H.B.; Redlinger, I.M.; Leesch, J.G.; Davis, R.; McDonald, L.L.; Zehner, J.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 675-679. ill. Includes references. (NAL Call No.: 421 J822).

1320

Energy consumption and food utilization of the Indian meal moth (Lepidoptera: Pyralidae) on different corn genotypes. JKESA. Hockensmith, P.E. Devine, T.L.; Legg, D.E.; Rodriguez, J.G. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Oct 1986. v. 59 (4). p. 598-603. Includes references. (NAL Call No.: DNAL 420 K13).

1321

Evaluation of fumigants for control of insects attacking wheat and corn in steel bins /by H.H. Walkden and R.B. Schwitzgebel. Walkden, H. H. 1893-. Schwitzgebel, R. B. 1918-. Washington : U.S. Dept. of Agriculture, 1951. Caption title. 20 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84Te no.1045).

1322

Evaluation of malathion, synergized pyrethrum, and diatomaceous earth on shelled corn as protectants against insects in small bins / by Delmon W. La Hue . La Hue, D. W. 1911-. Washington, D.C. : Agricultural Research Service, U.S. Dept. of Agriculture, 1966. Cover title. 10 p. ; 26 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84Mr no.768).

1323

Evaluation of methoxychlor for the protection of stored wheat and shelled corn from insect attack / by H.H. Walkden and Howard D. Nelson . Walkden, H. H. 1893-. Nelson, Howard D. 1913-. Washington, D.C. : Marketing Research Division, Agricultural Marketing Service, U.S. Dept. of Agriculture, 1958. Cover title.~ "February 1958.". vi, 25 p. : ill. ; 26 cm. (NAL Call No.: DNAL 1 Ag84Mr no.213).

1324

Evaluation of ryania for the protection of stored wheat and shelled corn from insect attack / by H.H. Walkden and H.D. Nelson . Walkden, H. H. 1893-. Nelson, Howard D. 1913-. Washington, D.C. : Marketing Research Division, Agricultural Marketing Service, U.S. Dept. of Agriculture, 1958. Cover title.~ "July 1958.". iv, 21 p. ; 26 cm. (NAL Call No.: DNAL 1 Ag84Mr no.245).

1325

Evaluation of synergized pyrethrum for the protection of stored wheat and shelled corn from insect attack / by H.H. Walkden and Howard D. Nelson . Walkden, H. H. 1893-. Nelson, Howard D. 1913-. Washington, D.C. : Marketing Research Division, Agricultural Marketing Service, U.S. Dept. of Agriculture, 1959. Cover title.~ "April 1959.". 48 p. : ill. ; 26 cm. (NAL Call No.: DNAL 1 Ag84Mr no.322).

1326

Factors contributing to resistance of exotic maize populations to maize weevil, *Sitophilus zeamais*. JCECD. Serratos, A. Arnason, J.T.; Nozzolillo, C.; Lambert, J.D.H.; Philogene, B.J.R.; Fulcher, G.; Davidson, K.; Peacock, L.; Atkinson, J.; Morand, P. New York, N.Y. : Plenum Press. Journal of chemical ecology. Apr 1987. v. 13 (4). p. 751-762. ill. Includes references. (NAL Call No.: DNAL QD415.A1U6).

1327

Factors influencing the distribution of maize weevil (Coleoptera: Curculionidae) eggs on maize. EVETEX. Legg, D.E. Barney, J.B.; Tipping, P.W.; Rodriguez, J.G. College Park, Md. : Entomological Society of America. Environmental entomology. June 1987. v. 16 (3). p. 809-813. Includes references. (NAL Call No.: DNAL QL461.E532).

1328

Feasibility of fumigating unmodified river barges with phosphine while in transit. JEENAI. Zettler, J.L. Leesch, J.G.; Gillenwater, H.B.; Redlinger, L.M.; Davis, R.; Zehner, J.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1986. v. 79 (5). p. 1315-1318. Includes references. (NAL Call No.: DNAL 421 J822).

## (PROTECTION OF PLANT PRODUCTS - INSECTS)

1329

**The infestation of corn ears by the European corn borer, and cribbed corn as an auxiliary source of infestation /by L.H. Patch.**  
Patch, L. H. 1896-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. Caption title. 8 p. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.275).

1330

**Insect damage to corn in three Southeastern States at time of harvest and in farm storage / by W.G. Eden .**  
Eden, W. G. 1918-. Washington, D.C. : Agricultural Research Service, U.S. Dept. of Agriculture, 1967. Cover title. 9 p. ; 26 cm. (NAL Call No.: DNAL 1 Ag84Mr no.792).

1331

**Insecticidal effects of cyanolipids on three species of stored product insects, European corn borer (Lepidoptera:Pyralidae) larvae, and striped cucumber beetle (Coleoptera:Chrysomelidae) (Oryzaephilus surinamensis, Tribolium confusum, Sitophilus oryzae, Acalymma vittata, Ostrinia nubilalis).**  
Mikolajczak, K.L. Madrigal, R.V.; Smith, C.R. Jr.; Reed, D.K. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1984. v. 77 (5). p. 1144-1148. Includes 18 references. (NAL Call No.: 421 J822).

1332

**Interactions between maize weevil (Coleoptera:Curculionidae) infestations and infection by Aspergillus flavus and other fungi in stored corn.**  
JESCEP. Dix, D.E. All, J.N. Tifton, Ga. : The Entomological Science Society. Journal of Entomological Science. Apr 1987. v. 22 (2). p. 108-118. Includes references. (NAL Call No.: DNAL QL461.G4).

1333

**Joint effects of temperature and insecticides on mortality and fecundity of Sitophilus oryzae (Coleoptera:Curculionidae) in wheat and maize.**  
JEENAI. Thaug, M. Collins, P.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1986. v. 79 (4). p. 909-914. Includes references. (NAL Call No.: DNAL 421 J822).

1334

**Mating behavior of the maize weevil, Sitophilus zeamais (Coleoptera:Curculionidae).**  
AESAAI. Walgenbach, C.A. Burkholder, W.E. College Park, Md. : The Society. Annals of the Entomological Society of America. Sept 1987. v. 80 (5). p. 578-583. ill. Includes references. (NAL Call No.: DNAL 420 EN82).

1335

**New protection against stored-grain insects /by W.P. Flint and C.O. Mohr.**  
Flint, W. P. 1882-. Mohr, C. O. 1902-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1930. Cover title. p. 375 -388 : ill. ; 23 cm. (NAL Call No.: DNAL 100 I16S no.359).

1336

**Persistence and toxicity of chlorpyrifos-methyl in cornmeal.**  
GENSAB. Highland, H.A. Simonaitis, R.A.; Boatright, R.E. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 82-86. Includes references. (NAL Call No.: DNAL QL461.G4).

1337

**A possible function for thaumatin and a TMV-induced protein suggested by homology to a maize inhibitor.**  
NATUAS. Richardson, M. Valdes-Rodriguez, S.; Blanco-Labra, A. Neptune, N.J. : Macmillan Journals. Nature. June 4/10, 1987. v. 327 (6121). p. 432-434. Includes references. (NAL Call No.: DNAL 472 N21).

1338

**Present use of pest management practices in wheat, corn, and oats stored on the farm (Zea mays).**  
Storey, C.L. Sauer, D.B.; Walker, D. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 784-788. Includes references. (NAL Call No.: 421 J822).

1339

**Protecting stored corn from grain insects by bags impregnated with DDT.**  
KAEB. Jewett, H.H. Price, W.A. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. Aug 1951. (571). 8 p. ill. Includes 2 references. (NAL Call No.: DNAL 100 K41 (2)).

1340

**Protecting uninfested packages from attack by *Cadra cautella* (Lepidoptera: Pyralidae) with the parasitic wasp *Venturia canescens* (Hymenoptera: Ichneumonidae).**

JEENAI. Cline, L.D. Press, J.W.; Flaherty, B.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1986. v. 79 (2). p. 418-420. Includes references. (NAL Call No.: DNAL 421 J822).

1341

**Resistance of dent corn inbred lines to oviposition by the maize weevil.**

JKESA. Tipping, P.W. Rodriguez, J.G.; Poneleit, C.G.; Legg, D.E. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Jan 1988. v. 61 (1). p. 131-134. Includes references. (NAL Call No.: DNAL 420 K13).

1342

**Sorbic acid as a long-term protectant in stored corn.**

JEENAI. Dunkel, F.V. Read, N.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 805-812. ill. Includes references. (NAL Call No.: DNAL 421 J822).

1343

**The survival of European corn-borer larvae in barns and other storage places / L.B. Scott and L.H. Patch.**

Scott, L. B. 1888-. Patch, L. H. 1896-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. Caption title.~ "Contribution from Bureau of Entomology.". 7 p. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.281).

1344

**Tests with malathion and methoxychlor protective treatments for shelled corn stored in metal bins in the Southeast / by Herbert Womack and D.W. La Hue .**

Womack, Herbert, 1929-. La Hue, D. W. (Delmon William), 1911-. Washington, D.C. : Marketing Research Division, Agricultural Marketing Service, U.S. Dept. of Agriculture, 1959. "August 1959.". 11 p. ; 26 cm. (NAL Call No.: DNAL 1 Ag84Mr no.357).

# WEEDS

1345

**Adjuvant effects on absorption, translocation, and metabolism of haloxyfop-methyl in corn (*Zea mays*).**

WEESA6. Harrison, S.K. Wax, L.M. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 185-195. ill. Includes 23 references. (NAL Call No.: DNAL 79.8 W41).

1346

**Allelopathic effect of parthenium (*Parthenium hysterophorus* L.) extract and residue on some agronomic crops and weeds.**

JCECD. Mersie, W. Singh, M. New York, N.Y. : Plenum Press. Journal of chemical ecology. July 1987. v. 13 (7). p. 1739-1747. Includes references. (NAL Call No.: DNAL QD415.A1U6).

1347

**Alteration of atrazine uptake and metabolism by tridiphane in giant foxtail (*Setaria faberi*) and corn (*Zea mays*).**

WEESA6. Boydston, R.A. Slife, F.W. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1986. v. 34 (6). p. 850-858. Includes references. (NAL Call No.: DNAL 79.8 W41).

1348

**Biochemical effects of sethoxydim in excised root tips of corn (*Zea mays*).**

WEESA6. Hosaka, H. Takagi, M.K. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1987. v. 35 (5). p. 612-618. Includes references. (NAL Call No.: DNAL 79.8 W41).

1349

**Bioeconomic modeling to simulate weed control strategies for continuous corn (*Zea mays*).**

WEESA6. King, R.P. Lybecker, D.W.; Schweizer, E.E.; Zimdahl, R.L. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1986. v. 34 (6). p. 972-979. Includes references. (NAL Call No.: DNAL 79.8 W41).

1350

**Black cutworm and corn production in Missouri: A study of the restricted heptachlor use program.**

MAERA. Headley, J.C. English, L.M.; Ward, R.H.; Keaster, A.J. Columbia : The Station. Special report - University of Missouri - Columbia, Agricultural Experiment Station. Includes statistical data. Nov 1980. (255). 44 p. maps. (NAL Call No.: DNAL 100 M693SP).

1351

**Chemical control of *Echinochloa colonum* in sweet corn.**

JAUPA. Semidey, N. Almodovar, L. Mayaguez : University of Puerto Rico, Agricultural Experiment Station. The Journal of agriculture of the University of Puerto Rico. Oct 1986. v. 70 (4). p. 311-313. Includes references. (NAL Call No.: DNAL 8 P832J).

1353

**Chemical weed control in corn.**

Swann, C.W. Athens, Ga. : The Service. Bulletin - Cooperative Extension Service, University of Georgia, College of Agriculture. Nov 1986. (930, rev.). 11 p. (NAL Call No.: DNAL 275.29 G29B).

1352

**Chemical weed control in corn.**

Swann, C.W. Athens, Ga. : The Service. Bulletin - Cooperative Extension Service, University of Georgia, College of Agriculture. Sept 1985. (930, rev.). 12 p. (NAL Call No.: DNAL 275.29 G29B).

1354

**Chemical weed control in corn.**

Johnson, W.C. Athens, Ga. : The Service. Bulletin - Cooperative Extension Service, University of Georgia, College of Agriculture. Nov 1987. (930, rev.). 11 p. (NAL Call No.: DNAL 275.29 G29B).

1355

**Chemical weed control in corn and grain sorghum.**

Swann, C.W. Athens, Ga. : The Service. Bulletin - Cooperative Extension Service, University of Georgia, College of Agriculture. Jan 1985. (824, rev.). 15 p. (NAL Call No.: DNAL 275.29 G29B).

1356

**Chemical weed control in corn: 1985.**

Wrage, L.U. Arnold, W.E.; Johnson, P.O. Brookings, S.D. : The Service. FS - South Dakota State University, Cooperative Extension Service. 1985? . 20 p. (NAL Call No.: DNAL 275.29 S085FS).

1357

**Chloroacetanilide herbicide selectivity: analysis of glutathione and homogluthathione in tolerant, susceptible, and safened seedlings.** JAFCAU. Breaux, E.J. Patanella, J.E.; Sanders, E.F. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1987. v. 35 (4). p. 474-478. Includes references. (NAL Call No.: DNAL 381 J8223).

1358

**Color-infrared monitors crop changes.** FRHQA. Rundquist, D.C. Elmore, R.W.; Roeth, F.; Eisenhauer, D.E.; Doupnik, B. Jr. Lincoln, Neb. : The Station. Farm, ranch and home quarterly - Nebraska Agricultural Experiment Station. 1984/1985. v. 31 (2). p. 16-20. ill. (NAL Call No.: DNAL 100 N27N).

1359

**Comparisons of HOE-39866, SC-0224, paraquat, and glyphosate in no-till corn (Zea mays).** WEESA6. Wilson, H.P. Hines, T.E.; Bellinder, R.R.; Grande, J.A. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 531-536. Includes 13 references. (NAL Call No.: DNAL 79.8 W41).

1360

**Control of barnyardgrass, volunteer corn, and sorghum with new herbicides.** Wiese, A.F. Chenault, E.W.; Wood, M.L. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. Includes statistical data. Apr 1987. (4506). 12 p. (NAL Call No.: DNAL 100 T31P).

1361

**Control of triazine-resistant common lambsquarters (Chenopodium album) and two pigweed species (Amaranthus spp.) in corn (Zea mays).** WEESA6. Fuerst, E.P. Barrett, M.; Penner, D. Champaign, Ill. : Weed Science Society of America. Weed science. May 1986. v. 34 (3). p. 440-443. Includes references. (NAL Call No.: DNAL 79.8 W41).

1362

**Controlling weeds in corn with 2,4-D /by F.W. Slife ... et al. .** Slife, F. W. 1923-. Urbana, Ill. : University of Illinois, College of Agriculture, Extension Service in Agriculture and Home Economics, 1950. Cover title. 15 p. : ill. ; 23 cm. (NAL Call No.: DNAL 275.29 I162c no.652).

1363

**Corn production guide for 1980.** Zublena, J.P. Clemson, S.C. : The Service. Circular - Clemson University, Cooperative Extension Service. Nov 1979. (587,rev.). p. 1-6. (NAL Call No.: DNAL 275.29 S08E).

1364

**Corn weed control update.** Behrens, R. St. Paul : University of Minnesota, Office of Special Programs, 1983. Soils, Fertilizer and Agricultural Pesticides Short Course : proceedings : December 13-14, 1983 / presented by the University of Minnesota Institute of Agriculture, Forestry and Home Economics ... et al. . p. 69. (NAL Call No.: DNAL S631.3.S65 1983).

1365

**Corn (Zea mays) yield in relationship to johnsongrass (Sorghum halepense) population.** WEESA6. Bendixen, L.E. Champaign, Ill. : Weed Science Society of America. Weed science. May 1986. v. 34 (3). p. 449-451. Includes references. (NAL Call No.: DNAL 79.8 W41).

1366

**Crop competition with wild proso millet in Minnesota.** Coultas, J. St. Paul : University of Minnesota, Office of Special Programs, 1983. Soils, Fertilizer and Agricultural Pesticides Short Course : proceedings : December 13-14, 1983 / presented by the University of Minnesota Institute of Agriculture, Forestry and Home Economics ... et al. . p. 99-107. (NAL Call No.: DNAL S631.3.S65 1983).

1367

**Crownvetch as influenced by tillage in a corn-crownvetch living mulch system.** PNWSB. Loughran, J.C. Hartwig, N.L. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 7-12. Includes references. (NAL Call No.: DNAL 79.9 N814).

1368

**The cultivation of corn weed control vs. moisture conservation /by D.C. Wimer and M.B. Harland.** Wimer, D. C. 1893-. Harland, M. B. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1925. Cover title.~ "This bulletin is a revision of No. 181, Soil Moisture and Tillage for Corn, issued in 1915."--P. 174 . p. 173 -196 : ill. ; 23 cm. (NAL Call No.: DNAL 100 I16S no.259).

## (WEEDS)

1369

**Decline in phytotoxicity of benzyl isothiocyanate formulated as granules.**  
WEESA6. Dale, J.E. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 325-327. Includes 8 references. (NAL Call No.: DNAL 79.8 W41).

1370

**Degradation of atrazine by Pseudomonas: N-dealkylation and dehalogenation of atrazine and its metabolites.**  
JAFCAU. Behki, R.M. Khan, S.U. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1986. v. 34 (4). p. 746-749. Includes references. (NAL Call No.: DNAL 381 J8223).

1371

**Early postemergence weed control in corn with fluorochloridone-triazine combinations.**  
PNWSB. Kupatt, C.C. Ilnicki, R.D.; Beale, M.W. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1985. v. 39. p. 63-66. (NAL Call No.: DNAL 79.9 N814).

1372

**Early preplant programs for no-till corn.**  
Ritter, R.L. College Park, Md. : The Service. The Agronomist - Cooperative Extension Service, University of Maryland. Spring 1987. v. 24 (1). p. 11-12. (NAL Call No.: DNAL S71.A46).

1373

**Economic realities influencing weed control programs of the eighties: new trends in research, development, registration and marketing.**  
Riggelman, J.D. Sacramento, Calif. : California Weed Conference Office. Proceedings - California Weed Conference. 1986. (38th). p. 41-48. Includes references. (NAL Call No.: DNAL 79.9 C122).

1374

**Effect of age, size, and weight of witchweed seeds on host/parasite relations (Striga asiatica, maize, sorghum, rice, sugarcane).**  
Bebawi, F.F. Eplee, R.E.; Norris, R.S. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1984. v. 74 (9). p. 1074-1078. ill. Includes 21 references. (NAL Call No.: 464.8 P56).

1375

**Effect of barnyardgrass competition in field corn.**  
Mitich, L.W. Smith, N.L. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 136. (NAL Call No.: DNAL 79.9 W52R).

1376

**Effect of CDA and flat-fan nozzles: carrier volume and rate on activity of SC-0224 and glyphosate.**  
PNWSB. Hartwig, N.L. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1985. v. 39. p. 57-62. (NAL Call No.: DNAL 79.9 N814).

1377

**Effect of difenopenten-ethyl on isolated corn (Zea mays L.) and soybean (Glycine max L.) mitochondrial membrane integrity and physiological activities.**  
PCBPB. Gealy, D.R. Boydston, R.A.; Klein, R.R.; Koeppe, D.E. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Jan 1987. v. 27 (1). p. 106-113. Includes references. (NAL Call No.: DNAL SB951.P49).

1378

**Effect of foxtail infestation on corn rootworm larvae (Coleoptera:Chrysomelidae) under two corn-planting dates.**  
EVETEX. Johnson, T.B. Turpin, F.T.; Bergman, M.K. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1984. v. 13 (5). p. 1245-1248. Includes references. (NAL Call No.: DNAL QL461.E532).

1379

**Effect of haloxyfop and haloxyfop-methyl on elongation and respiration of corn (Zea mays) and soybean (Glycine max) roots.**  
WEESA6. Gronwald, J.W. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 196-202. ill. Includes 22 references. (NAL Call No.: DNAL 79.8 W41).

1380

**Effect of herbicide incorporation methods on shattercane (Sorghum bicolor) control in corn (Zea mays).**  
WEESA6. Hayden, T.A. Burnside, D.C. Champaign, Ill. : Weed Science Society of America. Weed science. May 1987. v. 35 (3). p. 364-372. Includes references. (NAL Call No.: DNAL 79.8 W41).

1381

**The effect of herbicides and mechanical weed control on maize yields (Gramoxone, Afalon, Primextra, hoeings).**

Sabir, B.A. Iqbal, M.M.; Westfall, D.G.; Ghaffar, A. Fort Collins, Colo. : Water Management Research Project, Colorado State University. Improving irrigation water management on farms : annual technical report. June 1979. June 1979. p. 137-142. (NAL Call No.: TC801.I62).

1382

**Effect of prior pesticide use on thiocarbamate herbicide persistence and giant foxtail (*Setaria faberi*) control.**

WEESA6. Rudyanski, W.J. Fawcett, R.S.; McAllister, R.S. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1987. v. 35 (1). p. 68-74. Includes references. (NAL Call No.: DNAL 79.8 W41).

1383

**The effect of SC0774 and combination on weed control in field corn.**

Lange, A.H. Lange, K.F. S.1. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 196. (NAL Call No.: DNAL 79.9 W52R).

1384

**Effect of some s-triazine herbicides on phosphatases from corn (*Zea mays*) roots.**

WEESA6. Scarponi, L. Perucci, P. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1986. v. 34 (6). p. 807-810. Includes references. (NAL Call No.: DNAL 79.8 W41).

1385

**The effect of wheat straw mulch on weed control and corn growth /by Donald A. Crutchfield.**

Crutchfield, Donald A. 1984. Thesis (Ph. D.)--University of Nebraska, 1984. 184 leaves : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL DISS 84-28,205).

1386

**Effects of *Sphacelotheca holci* infection on morphology and competitiveness of johnsongrass (*Sorghum halepense*).**

WEESA6. Massion, C.L. Lindow, S.E. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1986. v. 34 (6). p. 883-888. Includes references. (NAL Call No.: DNAL 79.8 W41).

1387

**Effects of sublethal concentrations of bentazon, fluazifop, haloxyfop, and sethoxydim on corn (*Zea mays*).**

WEESA6. Chernicky, J.P. Slife, F.W. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 171-174. Includes 14 references. (NAL Call No.: DNAL 79.8 W41).

1388

**Effects of three weed residues on weed and crop growth.**

WEESA6. Johnson, W.C. III. Coble, H.D. Champaign, Ill. : Weed Science Society of America. Weed science. May 1986. v. 34 (3). p. 403-408. Includes references. (NAL Call No.: DNAL 79.8 W41).

1389

**Enhanced herbicide biodegradation in South Carolina soils previously treated with butylate.**

WEESA6. Skipper, H.D. Murdock, E.C.; Gooden, D.T.; Zublena, J.P.; Amakiri, M.A. Champaign, Ill. : Weed Science Society of America. Weed science. July 1986. v. 34 (4). p. 558-563. Includes 33 references. (NAL Call No.: DNAL 79.8 W41).

1390

**Evaluation of early preplant herbicide applications in corn, Powell.**

Miller, S.D. S.1. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 124. (NAL Call No.: DNAL 79.9 W52R).

1391

**Evaluation of early preplant herbicide applications in corn, Torrington.**

Miller, S.D. S.1. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 125. (NAL Call No.: DNAL 79.9 W52R).

1392

**Evaluation of postemergence herbicide treatments for weed control in corn.**

Miller, S.D. Krall, J.M. S.1. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 201. (NAL Call No.: DNAL 79.9 W52R).

## **(WEEDS)**

**1393**

**Evaluation of postemergence herbicides in corn.**  
Miller, S.D. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 128. (NAL Call No.: DNAL 79.9 W52R).

**1394**

**Evaluation of postemergence herbicides in field corn.**  
Mitich, L.W. Smith, N.L. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 134-135. (NAL Call No.: DNAL 79.9 W52R).

**1395**

**Evaluation of postemergence herbicides in field corn.**  
Mitich, L.W. Duey, M.S.; Smith, N.L. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 203-204. (NAL Call No.: DNAL 79.9 W52R).

**1396**

**Evaluation of preemergence herbicides in corn.**  
Miller, S.D. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 127. (NAL Call No.: DNAL 79.9 W52R).

**1397**

**Evaluation of preemergence herbicides in corn.**  
Miller, S.D. Krall, J.M. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 194-195. (NAL Call No.: DNAL 79.9 W52R).

**1398**

**Evaluation of preplant incorporated herbicides in corn.**  
Miller, S.D. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 126. (NAL Call No.: DNAL 79.9 W52R).

**1399**

**Evaluation of preplant incorporated herbicides in corn.**  
Miller, S.D. Krall, J.M. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 192-193. (NAL Call No.: DNAL 79.9 W52R).

**1400**

**Evaluation of preplant incorporated herbicides in field corn.**  
Mitich, L.W. Smith, N.L. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 132-133. (NAL Call No.: DNAL 79.9 W52R).

**1401**

**Evaluation of preplant incorporated herbicides in field corn.**  
Mitich, L.W. Duey, M.S.; Smith, N.L. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 190-191. (NAL Call No.: DNAL 79.9 W52R).

**1402**

**Evaluation of SC-0051 and SC-0098 for postemergence weed control in sweet corn.**  
Kidder, D.W. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 211-212. (NAL Call No.: DNAL 79.9 W52R).

**1403**

**Evaluation of SC-0774, SC-0051 and SC-5676 in field corn.**  
Evans, J.O. Gunnell, R.W. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 130-131. (NAL Call No.: DNAL 79.9 W52R).

**1404**

**Factors influencing corn (Zea mays) tolerance to trifluralin.**  
WEESA6. Roggenbuck, F.C. Penner, D. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1987. v. 35 (1). p. 89-94. Includes references. (NAL Call No.: DNAL 79.8 W41).

**1405**

**Giant foxtail and velvetleaf control in no-tillage corn.**  
PNWSB. Hartwig, N.L. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 26-31. Includes references. (NAL Call No.: DNAL 79.9 N814).

1406

**A guide to no-till planting after corn or soybeans.**

Griffith, D.R. Mannering, J.V.; Mengel, D.B.; Parsons, S.D.; Bauman, T.T.; Scott, D.H.; Edwards, C.R.; Turpin, F.T.; Doster, D.H. West Lafayette, Ind. : The Service. Publication ID - Cooperative Extension Service, Purdue University. Dec 1982. (154). 11 p. ill. (NAL Call No.: DNAL 275.29 IN2ID).

1407

**Herbicide applications on wheat and stubble for no-tillage corn.**

AGJDAT. Wicks, G.A. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1986. v. 78 (5). p. 843-848. Includes references. (NAL Call No.: DNAL 4 AM34P).

1408

**Herbicide evaluations for no-till soybean (Glycine max) production in corn (Zea mays) residue.**

WEESA6. Moomaw, R.S. Martin, A.R. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1985. v. 33 (5). p. 679-685. Includes 17 references. (NAL Call No.: DNAL 79.8 W41).

1409

**Herbicide evaluations in field corn.**

Arnold, R.N. Gregory, E.J.; Price, W.J. S.1. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 122-123. (NAL Call No.: DNAL 79.9 W52R).

1410

**Herbicide field evaluation trials on field crops, 1986.**

Frans, R. Corbin, B.; Johnson, D.; McClelland, M. Fayetteville : The Station. Research series - University of Arkansas Agricultural Experiment Station. Includes statistical data. Mar 1987. (354). 92 p. (NAL Call No.: DNAL S541.5.A8R47).

1411

**Herbicide performance with different tillage systems.**

Siemens, J.C. McGlamery, M.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, Summer 1985. (fiche no.

85-1010). 16 p. (NAL Call No.: DNAL FICHE 290.9 AM32P).

1412

**Hydrolytic activation versus oxidative degradation of assert herbicide, and imidazolinone aryl-carboxylate, in susceptible wild oat versus tolerant corn and wheat.**

PCBPB. Brown, M.A. Chiu, T.Y.; Miller, P. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Jan 1987. v. 27 (1). p. 24-29. Includes references. (NAL Call No.: DNAL SB951.P49).

1413

**Identification of the initial metabolites of acetochlor in corn and soybean seedlings.**

JAFCAU. Breaux, E.J. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Sept/Oct 1986. v. 34 (5). p. 884-888. Includes references. (NAL Call No.: DNAL 381 J8223).

1414

**Imidazolinones and acetohydroxyacid synthase from higher plants: Properties of the enzyme from maize suspension culture cells and evidence for the binding of imazapyr to acetohydroxyacid synthase in vivo.**

PLPHA. Muhitch, M.J. Shaner, D.L.; Stidham, M.A. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Feb 1987. v. 83 (2). p. 451-456. Includes references. (NAL Call No.: DNAL 450 P692).

1415

**Influence of application method on the activity of butylate and EPTC in reduced-tillage corn (Zea mays).**

WEESA6. Buhler, D.D. Champaign, Ill. : Weed Science Society of America. Weed science. May 1987. v. 35 (3). p. 412-417. Includes references. (NAL Call No.: DNAL 79.8 W41).

1416

**Influence of flowering weeds associated with reduced tillage in corn on a black cutworm (Lepidoptera:Noctuidae) parasitoid, Meteorus rubens (Nees von Esenbeck) (Agrotis ipsilon).** Foster, M.A. Ruesink, W.G. College Park, Md. : Entomological Society of America. Environmental entomology. June 1984. v. 13 (3). p. 664-668. Includes references. (NAL Call No.: QL461.E532).

## (WEEDS)

1417

**Influence of herbicides and tillage on the control of triazine-resistant smooth pigweed (*Amaranthus hybridus*) in corn (*Zea mays*) and soybeans (*Glycine max*).**  
WEESA6. Ritter, R.L. Harris, T.C.; Varano, W.J. Champaign, Ill. : Weed Science Society of America. Weed science. May 1985. v. 33 (3). p. 400-404. Includes 19 references. (NAL Call No.: DNAL 79.8 W41).

1418

**Influence of weed control programs in intensive cropping systems.**  
WEESA6. Glaze, N.C. Dowler, C.C.; Johnson, A.W.; Sumner, D.R. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1984. v. 32 (6). p. 762-767. Includes 10 references. (NAL Call No.: DNAL 79.8 W41).

1419

**Inhibition of velvetleaf (*Abutilon theophrasti*) germination and growth by benzyl isothiocyanate, a natural toxicant (Maize, soybeans).**  
Wolf, R.B. Spencer, G.F.; Kwolek, W.F. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1984. v. 32 (5). p. 612-615. ill. Includes 19 references. (NAL Call No.: 79.8 W41).

1420

**Integrating techniques of vector and weed-host suppression into control programs for maize virus diseases.**  
All, J.N. Wooster : Ohio Agricultural Research and Development Center, 1983. Proceedings : International Maize Virus Disease Colloquium and Workshop, Wooster, Ohio, August 2-6, 1982 / edited by D.T. Gordon ... et al. . p. 243-247. Includes references. (NAL Call No.: DNAL SB608.M2I55 1982).

1421

**Late season weed control strategies.**  
Ritter, R.L. College Park, Md. : The Service. The Agronomist - Cooperative Extension Service, University of Maryland. Aug 1986. v. 23 (8). p. 14-15. (NAL Call No.: DNAL S71.A46).

1422

**Listing leaves herbicides behind.**  
Cramer, C. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. May/June 1987. v. 9 (4). p. 38-40. ill. (NAL Call No.: DNAL S1.N32).

1423

**Movement and germination of weed seeds in ridge-till crop production systems.**  
WEESA6. Forcella, F. Lindstrom, M.J. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1988. v. 36 (1). p. 56-59. ill. Includes references. (NAL Call No.: DNAL 79.8 W41).

1424

**No-till soybeans easier than no-till corn.**  
Fee, R. Des Moines, Iowa : Meredith Corp. Successful farming. Feb 1986. v. 84 (4). p. 18-19. ill. (NAL Call No.: DNAL 6 SU12).

1425

**Northern and western corn rootworm (Coleoptera: Chrysomelidae) oviposition in corn as influenced by foxtail populations and tillage systems.**  
JEENAI. Johnson, T.B. Turpin, F.T. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 57-60. Includes references. (NAL Call No.: DNAL 421 J822).

1426

**Physiological responses to sethoxydim in tissues of corn (*Zea mays*) and pea (*Pisum sativum*).**  
WEESA6. Hosaka, H. Takagi, M.K. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1987. v. 35 (5). p. 604-611. ill. Includes references. (NAL Call No.: DNAL 79.8 W41).

1427

**Postemergence broadleaf herbicides for corn.**  
Wrage, L.J. Brookings, S.D. : The Department. Field facts : soils, insects, diseases, weeds, crops - South Dakota State University, Cooperative Extension, Plant Science Department. June 5, 1987. v. 2 (9). p. 3-4. (NAL Call No.: DNAL S596.7.F44).

1428

**Postemergence control of giant foxtail (*Setaria faberi*) in corn (*Zea mays*) with tridiphane and triazine combinations.**  
WEESA6. Boydston, R.A. Slife, F.W. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1987. v. 35 (1). p. 103-108. Includes references. (NAL Call No.: DNAL 79.8 W41).

1429

**Postemergence fall panicum control in corn with DOWCO 356-triazine combinations.**  
PNWSB. Kupatt, C.C. Ilnicki, R.D.; Vitolo, D.B. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1985. v. 39. p. 44-48. Includes 2 references. (NAL Call No.: DNAL 79.9 N814).

1430

**Postemergence herbicides for weed control in field corn.**  
OASPA. Stanger, C.E. Corvallis, Or. : The Station. Special report - Oregon State University, Agricultural Experiment Station. Aug 1985. (748). p. 29-31. (NAL Call No.: DNAL 100 OR3M).

1431

**Postemergence weed control in field corn.**  
Wright, S.D. Mitich, L.W. S.l. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 206-207. (NAL Call No.: DNAL 79.9 W52R).

1432

**Postemergence weed control in short season field corn.**  
Wright, S.D. Mitich, L.W. S.l. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 205. (NAL Call No.: DNAL 79.9 W52R).

1433

**Postemergence weed control with pendimethalin as influenced by ethomeen T/25 surfactant.**  
PNWSB. Herrick, R.M. Ilnicki, R.D. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1986. v. 40. p. 44-48. Includes references. (NAL Call No.: DNAL 79.9 N814).

1434

**Pre-emergence, preplant incorporated, and post-emergence weed control of field corn.**  
Orr, J.P. Havens, D. S.l. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 197-200. (NAL Call No.: DNAL 79.9 W52R).

1435

**Preemergence and preplant incorporated herbicides for control of johnsongrass in corn.**  
RRMSD. Stevens, W.E. Johnson, J.R.; Hurst, H.R. Mississippi State, Miss. : The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. May 1986. v. 11 (6). 2 p. (NAL Call No.: DNAL S79.E37).

1436

**Principles of weed control for reduced-tillage corn production.**  
Triplett, G.B. Jr. Champaign, Il. : Weed Science Society of America. Monograph series of the Weed Science Society of America. 1985. (2). p. 26-40. Includes references. (NAL Call No.: DNAL SB610.M65).

1437

**Production guidelines for growing corn, grain sorghum, and soybeans with conservation tillage in South Carolina.**  
Palmer, J.H. Zublena, J.P.; Murdock, E.C.; Nolan, C.N.; Griffin, R.P.; Manley, D.; Chapin, J.W.; Smith, F.H.; Krausz, J.P.; Wolak, F.W. Clemson, S.C. : The Service. Circular - Clemson University, Cooperative Extension Service. Jan 1985. (539,rev.). 28 p. (NAL Call No.: DNAL 275.29 S08E).

1438

**Pyridate alone and in combination with atrazine, cyanazine, and pendimethalin in corn.**  
PNWSB. Else, M.J. Vitolo, D.B.; Ilnicki, R.D. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1986. v. 40. p. 37-41. Includes references. (NAL Call No.: DNAL 79.9 N814).

1439

**Recommended herbicides for corn.**  
Murdock, E.C. Gossett, B.J.; Nolan, C.N. Clemson, S.C. : The Service. Circular - Clemson University, Cooperative Extension Service. Nov 1979. (587,rev.). p. 8-17. (NAL Call No.: DNAL 275.29 S08E).

1440

**Reduced tillage systems: How they compare.**  
AGENA. Hummel, J.W. Wax, L.M.; Siemens, J.C. St. Joseph, Mich. : American Society of Agricultural Engineers. Agricultural engineering. Sept 1985. v. 66 (9). p. 18-19. 111. (NAL Call No.: DNAL 58.8 AG83).

## (WEEDS)

1441

**Safening corn against chlorsulfuron and DPX-T6376 injury.**  
SWSPB. Mersie, W. Foy, C.L. Champaign : The Society. Proceedings - Southern Weed Science Society. Jan 17-19, 1984. (37th). p. 328-334. ill. Includes 4 references. (NAL Call No.: DNAL 79.9 S08).

1442

**Screening living mulches and cover crops for weed suppression in no till sweet corn.**  
PNWSB. DeGregorio, R.E. Ashley, R.A. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1985. v. 39. p. 80-84. Includes 8 references. (NAL Call No.: DNAL 79.9 N814).

1443

**Seedling emergence responses to corn seeds coated with starch containing entrapped EPTC.**  
JAFCAU. Shasha, B.S. Trimnell, D.; Schreiber, M.M.; White, M.D. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1987. v. 35 (4). p. 457-461. Includes references. (NAL Call No.: DNAL 381 J8223).

1444

**Selectivity mechanisms of sethoxydim absorption into tissues of corn (Zea mays) and pea (Pisum sativum).**  
WEESA6. Hosaka, H. Takagi, M.K. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1987. v. 35 (5). p. 619-622. Includes references. (NAL Call No.: DNAL 79.8 W41).

1445

**Soil active herbicides evaluated for weed control in sweet corn.**  
DASPA. Stanger, C.E. Corvallis, Or. : The Station. Special report - Oregon State University. Agricultural Experiment Station. Aug 1985. (748). p. 32-35. (NAL Call No.: DNAL 100 OR3M).

1446

**Tillage and mulch systems study in field corn.**  
PNWSB. Enache, A. Ilnicki, R.D. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 13-17. Includes references. (NAL Call No.: DNAL 79.9 N814).

1447

**Tridiphane as a synergist for herbicides in corn (Zea mays) and proso millet (Panicum miliaceum).**  
WEESA6. Ezra, G. Dekker, J.H.; Stephenson, G.R. Champaign, Ill. : Weed Science Society of America. Weed science. May 1985. v. 33 (3). p. 287-290. ill. Includes 13 references. (NAL Call No.: DNAL 79.8 W41).

1448

**Trouble-shooter's guide to no-till corn concerns.**  
Waukesha, Wis. : No-Till Farmer, Inc. No-till farmer. Feb 1987. p. 8-9. ill. (NAL Call No.: DNAL S604.N6).

1449

**Velvetleaf.**  
CRSOA. Roeth, F. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Mar 1987. v. 39 (6). p. 10-11. ill. (NAL Call No.: DNAL 6 W55).

1450

**Washoff characteristics of herbicides applied to corn residue.**  
Baker, J.L. Shiers, L.E. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-1519). 10 p. ill. Includes references. (NAL Call No.: DNAL FICHE S-72).

1451

**Weed control in corn.**  
CRSOA. Bauman, T.T. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Mar 1986. v. 38 (6). p. 15-16. ill. (NAL Call No.: DNAL 6 W55).

1452

**Weed control in growing corn /by Claude K. Shedd, Edgar V. Collins and J. Brownlee Davidson.**  
Shedd, C. K. 1884-. Collins, Edgar Vermont, 1887-; Davidson, Jay Brownlee, 1880-. Ames, Iowa : Agricultural Experiment Station, Agricultural Extension Service, Iowa State College, 1942. Caption title. p. 440-467 : ill. ; 23 cm. (NAL Call No.: DNAL 100 Io9 no.P44).

1453

**Weed control projects. I. Corn.**

Ritter, R.L. College Park, Md. : The Service. The Agronomist - Cooperative Extension Service, University of Maryland. Dec 1984. v. 21 (12). p. 17-18. (NAL Call No.: DNAL S71.A46).

1454

**Weed seed decline and buildup in soils under various corn management systems across Nebraska.**

AGUDAT. Burnside, D.C. Wilson, R.G.; Wicks, G.A.; Roeth, F.W.; Moomaw, R.S. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1986. v. 78 (3). p. 451-454. Includes 17 references. (NAL Call No.: DNAL 4 AM34P).

1455

**Weed seed demise in soil in weed-free-corn (Zea mays) production across Nebraska.**

WEESA6. Burnside, D.C. Moomaw, R.S.; Roeth, F.W.; Wicks, G.A.; Wilson, R.G. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 248-251. Includes 19 references. (NAL Call No.: DNAL 79.8 W41).

1456

**Weed species distribution as influenced by tillage and herbicides.**

WEESA6. Wrucke, M.A. Arnold, W.E. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1985. v. 33 (6). p. 853-856. Includes 10 references. (NAL Call No.: DNAL 79.8 W41).

1457

**Weeds in agronomic crops--corn.**

SWSPB. Vidrine, P.R. Champaign : The Society. Proceedings - Southern Weed Science Society. 1987. (40th). p. 1-10. (NAL Call No.: DNAL 79.9 S08).

1458

**Weeds of corn fields / by L.H. Pammel .**

Pammel, L. H. 1862-1931. Ames, Iowa : Experiment Station, Iowa State College of Agriculture and Mechanic Arts, 1898. 52 p. : ill., maps ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 100 Io9 no.39).

1459

**Wild proso millet control in corn.**

Miller, S.D. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 208-209. (NAL Call No.: DNAL 79.9 W52R).

1460

**Wild proso millet control in corn.**

Miller, S.D. Shoemaker, R. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 129. (NAL Call No.: DNAL 79.9 W52R).

1461

**Wild proso millet control in sweet corn with tridaphane.**

McReynolds, R. Vinal, R.; William, R.D. S.I. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1986. p. 76-77. (NAL Call No.: DNAL 79.9 W52R).

1462

1980 pesticide use on field corn in the Lake States /by Michael Hanthorn ... et al. . --. Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, United States Department of Agriculture, 1982. "January 1982.". iii, 23 p. : map ; 28 cm. --. Bibliography: p. 19. (NAL Call No.: DNAL aSB950.2.A14N52).

1463

**1980 pesticide use on field corn in the major producing states /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, U.S. Dept. of Agriculture, 1982. "February 1982.". iii, 33 p. : map ; 28 cm. --. Bibliography: p. 28. (NAL Call No.: DNAL aSB191.M2N3).

1464

1988 corn pest management. Weed, insect, disease & nematode control recommendations. Everest, J.W. Patterson, M.G.; Mask, P.; Cobb, P.P.; Hagan, A. Auburn, Ala. : The Service. Circular ANR - Cooperative Extension Service, Auburn University. In subseries: Integrated Pest Management. Dec 1987. (428). 11 p. (NAL Call No.: DNAL S544.3.A2C47).

# PESTICIDES - GENERAL

1465

**Aged and bound herbicide residues in soil and their bioavailability. 2. Uptake of aged and non-extractable (bound)**

**carbonyl-14C methabenzthiazuron residues by maize.**  
JPFC2. Kloskowski, R. Fuhr, F. New York, N.Y. : Marcel Dekker. Journal of environmental science and health. Part B. Pesticides, food contaminants, and agricultural wastes. 1987. v. B22 (6). p. 623-642. ill. Includes references. (NAL Call No.: DNAL TD172.J61).

1466

**Agricultural pests as common property: control of the corn rootworm.**

Lazarus, W.F. Dixon, B.L. Ames, Iowa : American Agricultural Economics Association. Extract: Insecticide resistance is an increasingly widespread problem reducing effectiveness and necessitating a switch to more expensive controls. A common property resource model is used to describe potential gain from internalizing resistance externalities through regional coordination. A nonlinear programming model of an Illinois cash grain farm is used to estimate the gain for corn rootworm control where rotation to soybeans is an alternative to insecticide. Switching to rotation as resistance builds causes a relatively minor decrease in profits because soybeans are profitable. Gain from delaying resistance is slight. Co-states give price changes necessary to alter externality production. American journal of agricultural economics. Includes statistical data. Nov 1984. v. 66 (4). p. 456-465. Includes 10 references. (NAL Call No.: DNAL 280.8 J822).

1467

**Auxinlike activity and metabolism of mefluidide in corn (Zea mays) and soybean (Glycine max) tissue.**

WEESA6. Glenn, S. Rieck, C.E. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 452-456. Includes 20 references. (NAL Call No.: DNAL 79.8 W41).

1468

**Benomyl inhibition of Cotesia (= Apanteles) marginiventris survival in four lepidopterous hosts.**

GENSAB. Teague, T.G. Horton, D.L.; Yearian, W.C.; Phillips, J.R. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 76-81. Includes references. (NAL Call No.: DNAL QL461.G4).

1469

**Bioassay rating system for predicting mortality of moribund corn rootworm (Coleoptera:Chrysomelidae) larvae following exposure to insecticide-treated soil.**

JEENAI. Monke, B.J. Mayo, Z.B.; Ball, H.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1985. v. 78 (2). p. 467-470. Includes references. (NAL Call No.: DNAL 421 J822).

1470

**Bioavailability in rats of bound 14C residues from corn plants treated with 14C atrazine.**

JAFCAU. Khan, S.U. Kacew, S.; Molnar, S.J. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1985. v. 33 (4). p. 712-717. Includes references. (NAL Call No.: DNAL 381 J8223).

1471

**Biochemical response of inbred and hybrid corn (Zea mays L.) to R-25788 and its distribution with EPTC in corn seedlings.**

PCBPB. Lay, M.M. Niland, A.M. New York, N.Y. : Academic Press. Pesticide biochemistry and physiology. Feb 1985. v. 23 (1). p. 131-140. Includes 15 references. (NAL Call No.: DNAL SB951.P49).

1472

**Characterization of microorganisms in soils exhibiting accelerated pesticide degradation.**

BECTA. Reed, J.P. Kremer, R.J.; Keaster, A.J. New York, N.Y. : Springer-Verlag. Bulletin of environmental contamination and toxicology. Nov 1987. v. 39 (5). p. 776-782. Includes references. (NAL Call No.: DNAL RA1270.P35A1).

1473

**Characterization of the mode of action of the experimental herbicide LS 82-556**

**(S)3-N-(Methylbenzyl)carbamoyl-5-propionyl-2,6-lutidine .**

PCBPB. Matringe, M. Dufour, J.L.; Lherminier, J.; Scalla, R. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Oct 1986. v. 26 (2). p. 150-159. ill. Includes references. (NAL Call No.: DNAL SB951.P49).

1474

**Comparison of norflurazon absorption by excised roots of three plant species.**

PCBPB. Mersie, W. Singh, M. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. May 1987. v. 28 (1). p. 114-120. Includes references. (NAL Call No.: DNAL SB951.P49).

1475

**Corn pesticide performance in Missouri--1984.**  
MAERA. Reed, J.P. Keaster, A.U.; Kremer, R.U.;  
Kerr, H.D. Columbia : The Station. Special  
report - University of Missouri - Columbia,  
Agricultural Experiment Station. Dec 1985.  
(334). 12 p. maps. Includes references. (NAL  
Call No.: DNAL 100 M693SP).

1476

**Corn production guide for 1980.**  
Zublena, J.P. Clemson, S.C. : The Service.  
Circular - Clemson University, Cooperative  
Extension Service. Nov 1979. (587,rev.). p.  
1-6. (NAL Call No.: DNAL 275.29 S08E).

1477

**Corn soil insects research--1985 insecticide  
evaluations.**  
MAERA. Grundler, J.A. Keaster, A.U. Columbia :  
The Station. Special report - University of  
Missouri - Columbia, Agricultural Experiment  
Station. Includes statistical data. Nov 1985.  
(336). 37 p. (NAL Call No.: DNAL 100 M693SP).

1478

**Corn yield potential following alachlor and  
metolachlor treatments.**  
PNWSB. Hartwig, N.L. Fleet, W.C. Beltsville,  
Md. : The Society. Proceedings of the ...  
annual meeting - Northeastern Weed Science  
Society. 1987. v. 41. p. 32-35. (NAL Call No.:  
DNAL 79.9 N814).

1479

**A corn (Zea mays L.) bioassay technique for  
measuring chlorsulfuron levels in three  
Saskatchewan soils.**  
WEESA6. Groves, K.E.M. Foster, R.K. Champaign,  
Ill. : Weed Science Society of America. Weed  
science. Nov 1985. v. 33 (6). p. 825-828. ill.  
Includes 9 references. (NAL Call No.: DNAL 79.8  
W41).

1480

**Corn cob granules and pelleted carriers: New,  
controlled, safer methods of handling  
pesticides.**  
Vander Hooven, D.I.B. Philadelphia : American  
Society for Testing and Materials, c1983.  
Pesticide formulations and application systems,  
third symposium : a symposium / sponsored by  
ASTM Committee E-35 on Pesticides, Fort  
Mitchell, Ky., 12 Oct 1982 ; T.M. Kaneko, N.B.  
Akesson, editors. p. 132-140. ill. Includes 45  
references. (NAL Call No.: DNAL SB950.93.P47  
1983).

1481

**Degradation of atrazine by Pseudomonas:  
N-dealkylation and dehalogenation of atrazine  
and its metabolites.**  
JAFCAU. Behki, R.M. Khan, S.U. Washington, D.C.  
: American Chemical Society. Journal of  
agricultural and food chemistry. July/Aug 1986.  
v. 34 (4). p. 746-749. Includes references.  
(NAL Call No.: DNAL 381 J8223).

1482

**Degradation of terbufos (Counter) soil  
insecticide in corn fields under conservation  
tillage practices.**  
BECTA. Felsot, A.S. Bruce, W.N.; Steffey, K.S.  
New York, N.Y. : Springer-Verlag. Bulletin of  
environmental contamination and toxicology. Mar  
1987. v. 38 (3). p. 369-376. Includes  
references. (NAL Call No.: DNAL RA1270.P35A1).

1483

**Different rates of metabolism of two  
chloroacetanilide herbicides in Pioneer 3320  
corn.**  
PLPHA. O'Connell, K.M. Breau, E.U.; Fraley,  
R.T. Rockville, Md. : American Society of Plant  
Physiologists. Plant physiology. Feb 1988. v.  
86 (2). p. 359-363. ill. Includes references.  
(NAL Call No.: DNAL 450 P692).

1484

**Distribution of ethylene dibromide residues in  
whole corn and milled corn products.**  
CECHAF. Anderson, R.A. Peplinski, A.U.; Storey,  
C.L.; Bookwalter, G.N.; Black, L.T. St. Paul,  
Minn. : American Association of Cereal  
Chemists. Cereal chemistry. May/June 1985. v.  
62 (3). p. 198-200. Includes references. (NAL  
Call No.: DNAL 59.8 C33).

1485

**Economic consequences of restricting the use of  
organochlorine insecticides on cotton, corn,  
peanuts, and tobacco by Velmar W. Davis ... et  
al. --.**  
Davis, Velmar W. 1923-. Washington, D.C. : U.S.  
Dept. of Agriculture, Economic Research  
Service, 1970. viii, 52 p. : map --.  
Bibliography: p. 50-51. (NAL Call No.: DNAL  
Fiche S-81 no.178).

1486

**Economic impact of discontinuing aldrin use in  
corn production by Herman W. Delvo . --.**  
Delvo, Herman W. Washington, D.C. : U.S. Dept.  
of Agriculture, Economic Research Service,  
1974. vi, 17 p. --. Includes bibliographical  
references. (NAL Call No.: DNAL Fiche S-82)

## (PESTICIDES - GENERAL)

no.557).

1487

### **Economic thresholds under uncertainty with application to corn nematode management.**

Moffitt, I.J. Hall, D.C.; Osteen, C.D. Experiment, Ga. : The Association. Extract: An economic threshold of agricultural pest management is derived. Results provide a method for researchers to use in making improved pest control recommendations to farmers without farm level decisionmaking. An empirical illustration for lesion nematode management in irrigated corn is given and directions for further research are indicated. Southern journal of agricultural economics - Southern Agricultural Economics Association. Includes statistical data. Dec 1984. v. 16 (2). p. 151-157. Includes 15 references. (NAL Call No.: DNAL AGE HD101.S6).

1488

### **The effect of additives on the activity of sethoxydim.**

Lourens, A.F. Lange, A.H. S.l. : Western Society of Weed Science. Research progress report - Western Society of Weed Science. 1987. p. 210. (NAL Call No.: DNAL 79.9 W52R).

1489

### **The effect of DPX-F6025 on plant growth, pigment synthesis, and biomass synthesis.**

PNWSB. Devlin, R.M. Koszanski, Z.K. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1986. v. 40. p. 115-119. Includes references. (NAL Call No.: DNAL 79.9 N814).

1490

### **Effect of FMC-57020 on plant growth and pigment synthesis.**

PNWSB. Devlin, R.M. Koszanski, Z.K. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 95-99. Includes references. (NAL Call No.: DNAL 79.9 N814).

1491

### **Effect of perfluidone on metabolism of lipids in maize (Zea mays L.) and sunflower (Helianthus annuus L.).**

JPGRDI. Valadon, L.R.G. Kates, M. New York, N.Y. : Springer. Journal of plant growth regulation. 1984. v. 3 (2). p. 111-120. Includes 11 references. (NAL Call No.: DNAL QK745.J6).

1492

### **Effect of pesticides on zearalenone production in culture and in corn plants.**

PHYTAJ. Draughon, F.A. Churchville, D.C. St. Paul, Minn. : American Phytopathological Society. Phytopathology. May 1985. v. 75 (5). p. 553-556. Includes 18 references. (NAL Call No.: DNAL 464.8 P56).

1493

### **Effect of soil pH on imazaquin and imazethapyr adsorption to soil and phytotoxicity to corn (Zea mays).**

WEESA6. Renner, K.A. Meggitt, W.F.; Penner, D. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1988. v. 36 (1). p. 78-83. Includes references. (NAL Call No.: DNAL 79.8 W41).

1494

### **Effects of 2,4-D amine on root morphology and minerals of Zea seedlings.**

PYTLA. Kord, M.A.A. Corvallis, Or. : Harold N. and Alma L. Moldenke. Phytologia. Mar 1987. v. 62 (2). p. 91-99. Includes references. (NAL Call No.: DNAL 450 P563).

1495

### **Effects on wildlife of at-planting corn applications of granular carbofuran.**

JWMAA9. Balcomb, R. Bowen, C.A.; Wright, D.; Law, M. Bethesda, Md. : Wildlife Society. Journal of wildlife management. Oct 1984. v. 48 (4). p. 1353-1359. Includes references. (NAL Call No.: DNAL 410 J827).

1496

### **Enhanced herbicide biodegradation in South Carolina soils previously treated with butylate.**

WEESA6. Skipper, H.D. Murdock, E.C.; Gooden, D.T.; Zublena, J.P.; Amakiri, M.A. Champaign, Ill. : Weed Science Society of America. Weed science. July 1986. v. 34 (4). p. 558-563. Includes 33 references. (NAL Call No.: DNAL 79.8 W41).

1497

### **Environmental effects of metsulfuron and chlorsulfuron bioactivity in soil.**

JEVQAA. Anderson, R.L. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1985. v. 14 (4). p. 517-521. Includes references. (NAL Call No.: DNAL QH540.J6).

1498

**Establishment of residue analysis of propanil (Dichloropropionanilide), linuron and diphenamide in agricultural commodities.**  
JFPRDR. Ito, Y. Suzuki, H.; Ogawa, S.; Iwaida, M. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Apr 1985. v. 48 (4). p. 320-324. ill. Includes 6 references. (NAL Call No.: DNAL 44.8 J824).

1499

**European corn borer location on the corn plant as related to insecticidal control /by C.H. Batchelder.**  
Batchelder, C. H. 1891-. Washington : U.S. Dept. of Agriculture, 1949. Caption title. 20 p. : ill. ; 23 cm. Literature cited: p. 20. (NAL Call No.: DNAL 1 Ag84Te no.976).

1500

**Evaluation of fumigants for control of insects attacking wheat and corn in steel bins /by H.H. Walkden and R.B. Schwitzgebel.**  
Walkden, H. H. 1893-. Schwitzgebel, R. B. 1918-. Washington : U.S. Dept. of Agriculture, 1951. Caption title. 20 p. : ill. ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84Te no.1045).

1501

**Evidence for the interaction of an imidazolinone herbicide with leucine, valine, and isoleucine metabolism.**  
WEESA6. Anderson, P.C. Hibberd, K.A. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 479-483. ill. Includes 13 references. (NAL Call No.: DNAL 79.8 W41).

1502

**Fall, spring spraying works with sod (Atrazine, paraquat, no-till maize).**  
Waukesha, Wis. : No-Till Farmer, Inc. No-till farmer. Oct 1984. v. 13 (10). p. 8. ill. (NAL Call No.: S604.N6).

1503

**Farm worker exposure to terbufos (phosphorodithioic acid, S-(tert-butylthio) methyl O,O-diethyl ester) during planting operations of corn.**  
AECTCV. Devine, J.M. Kinoshita, G.B.; Peterson, R.P.; Picard, G.L. New York, N.Y. : Springer-Verlag. Archives of environmental contamination and toxicology. Jan 1986. v. 15 (1). p. 113-119. Includes references. (NAL Call No.: DNAL TD172.A7).

1504

**Fate of herbicide-derived aniline residues during ensilage.**  
BECTA. Lyons, C.D. Katz, S.E.; Bartha, R. New York, N.Y. : Springer-Verlag. Bulletin of environmental contamination and toxicology. Nov 1985. v. 35 (5). p. 704-710. Includes references. (NAL Call No.: DNAL RA1270.P35A1).

1505

**Field crop pests: farmers report the severity and intensity.**  
XAAIA. Suguiyama, L.F. Carlson, G.A. Washington, D.C. : The Department. Abstract: The extent of pesticide use and the prevalence of pest populations on field crops vary according to the pest, crop, region, and survey year. This report estimates the importance of individual pests on selected field crops on a regional and national basis. Surveyed farmers report that the most severe and intense pests were weeds in corn and soybean production, weeds and insects in cotton, and diseases and insects in tobacco. This study relied upon farmers' ability to identify the pest infestations causing economic damage on nine selected field crops. Detailed estimates of the relative importance, severity, and time intensity of target pests are tabulated. Agriculture information bulletin - U.S. Dept. of Agriculture. Includes statistical data. Feb 1985. (487). 52 p. Includes 5 references. (NAL Call No.: DNAL 1 AG84AB).

1506

**Field duration of chlorsulfuron bioactivity in the Central Great Plains.**  
JEVQAA. Anderson, R.L. Humburg, N.E. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. July/Sept 1987. v. 16 (3). p. 263-266. Includes references. (NAL Call No.: DNAL QH540.J6).

1507

**Identification of the initial metabolites of acetochlor in corn and soybean seedlings.**  
JAFCAU. Breaux, E.J. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Sept/Oct 1986. v. 34 (5). p. 884-888. Includes references. (NAL Call No.: DNAL 381 J8223).

1508

**Imidazolinones. Potent inhibitors of acetohydroxyacid synthase.**  
PLPHA. Shaner, D.L. Anderson, P.C.; Stidham, M.A. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Oct 1984. v. 76 (2). p. 545-546. ill. Includes 11 references. (NAL Call No.: DNAL 450 P692).

## (PESTICIDES - GENERAL)

1509

**Incorporation of granular soil insecticides by corn planters.**

Hummel, J.W. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-1017). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1510

**Influence of soil compaction on trifluralin phytotoxicity to corn.**

AGJDAT. Martin, A.G. Jordan, T.N.; Steinhardt, G.C. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1985. v. 77 (3). p. 481-483. Includes 12 references. (NAL Call No.: DNAL 4 AM34P).

1511

**Inhibition of fatty acid biosynthesis in isolated bean and maize chloroplasts by herbicidal phenoxy-phenoxypropionic acid derivatives and structurally related compounds.**

PCBPB. Hoppe, H.H. Zacher, H. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Dec 1985. v. 24 (3). p. 298-305. Includes references. (NAL Call No.: DNAL SB951.P49).

1512

**Inhibition of HC03- binding to photosystem II by atrazine at a low-affinity herbicide binding site.**

PLPHA. Stemler, A. Murphy, J. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Jan 1985. v. 77 (1). p. 179-182. ill. Includes 12 references. (NAL Call No.: DNAL 450 P692).

1513

**Insect control: field corn, sorghum and small grain 1986-1987.**

Moore, L. Barstow, B.; Cotty, S.; Lame, M. Tucson, Ariz. : The Service. Publication - Cooperative Extension Service, University of Arizona, College of Agriculture. 1986. (8615). 11 p. (NAL Call No.: DNAL S544.3.A6C6).

1514

**Insecticide tolerance of ground- and foliage-dwelling spiders (Araneae) in European corn borer (Lepidoptera: Pyralidae) action sites.**

EVETEX. Whitford, F. Showers, W.B.; Edwards, G.B. College Park, Md. : Entomological Society of America. Environmental entomology. June 1987. v. 16 (3). p. 779-785. Includes references. (NAL Call No.: DNAL QL461.E532).

1515

**Interaction studies of methyl parathion, carbofuran, permethrin, and piperonyl butoxide applied to southwestern corn borer larvae (Lepidoptera: Pyralidae).**

JEENAI. Christian, M.L. Owens, J.C.; Lewis, B.E.; Davis, F.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 549-552. Includes references. (NAL Call No.: DNAL 421 J822).

1516

**Interactions in the fate of chemicals in terrestrial systems.**

EESAD. Scheunert, I. Korte, F. New York : Academic Press. Ecotoxicology and environmental safety. June 1985. v. 9 (3). p. 385-391. Includes references. (NAL Call No.: DNAL QH545.A1E29).

1517

**Joint effects of temperature and insecticides on mortality and fecundity of Sitophilus oryzae (Coleoptera: Curculionidae) in wheat and maize.**

JEENAI. Thaug, M. Collins, P.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1986. v. 79 (4). p. 909-914. Includes references. (NAL Call No.: DNAL 421 J822).

1518

**L-2-Oxothiazolidine-r-carboxylic acid protection against tridiphenyl toxicity.**

WEESA6. Hilton, J.L. Pillai, P. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1986. v. 34 (5). p. 669-675. Includes references. (NAL Call No.: DNAL 79.8 W41).

1519

**Late season weed control strategies.**

Ritter, R.L. College Park, Md. : The Service. The Agronomist - Cooperative Extension Service, University of Maryland. Aug 1986. v. 23 (8). p. 14-15. (NAL Call No.: DNAL S71.A46).

1520

**Legume cover crops for no-till corn.**

Koch, P.L. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 119-120. (NAL Call No.: DNAL SB203.R6).

1521

**Loss of recovery capacity of plasmalemma K<sup>+</sup> influx after cutting in chlorsulfuron pretreated maize roots.**

PLPHA. De Agazio, M. Giardina, M.C. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Dec 1984. v. 76 (4). p. 940-942. ill. Includes 16 references. (NAL Call No.: DNAL 450 P692).

1522

**Mechanism of action of the imidazolinones and cell culture selection of tolerant maize.**

Shaner, D.L. Anderson, P.C. Orlando, Fla. : Academic Press, c1985. Biotechnology in plant science : relevance to agriculture in the eighties / edited by Milton Zaitlin, Peter Day, and Alexander Hollaender ; technical editor, Claire M. Wilson. Presented at a symposium, "Biotechnology in Plant Science: Relevance to Agriculture in the Eighties," June 1985, Ithaca, New York. p. 287-299. Includes references. (NAL Call No.: DNAL S494.5.B563B58).

1523

**Metabolism of isofenphos in southern corn rootworm.**

PCBPB. Hsin, C.Y. Coats, J.R. New York, N.Y. : Academic Press. Pesticide biochemistry and physiology. June 1986. v. 25 (3). p. 336-345. Includes 23 references. (NAL Call No.: DNAL SB951.P49).

1524

**Mode of methomyl and Bipolaris maydis (race T) toxin in uncoupling Texas male-sterile cytoplasm corn mitochondria.**

PLPHA. Klein, R.R. Koeppe, D.E. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Apr 1985. v. 77 (4). p. 912-916. Includes 27 references. (NAL Call No.: DNAL 450 P692).

1525

**Morphological and histological effects of sethoxydim on corn (Zea mays) seedlings.**

WEESA6. Hosaka, H. Inaba, H.; Satoh, A.; Ishikawa, H. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1984. v. 32 (6). p. 711-721. ill. Includes 8 references. (NAL Call No.: DNAL 79.8 W41).

1526

**New protection against stored-grain insects /by W.P. Flint and C.O. Mohr.**

Flint, W. P. 1882-. Mohr, C. O. 1902-. Urbana, Ill. : University of Illinois Agricultural Experiment Station, 1930. Cover title. p. 375 -388 : ill. ; 23 cm. (NAL Call No.: DNAL 100 I16S no.359).

1527

**No-tillage corn results affected by hybrids and pesticides in 1984 at the Green Acres Agronomy Farm.**

Gallaher, R.N. Baldwin, J.A. Gainesville, Fla. : The Station. Agronomy research report AY - Agricultural Experiment Stations, University of Florida. Includes statistical data. 1984? . (85-08). 8 p. (NAL Call No.: DNAL S540.A2F62).

1528

**Patterns of pesticide use on New York State produced sweet corn.**

Straub, R.W. Heath, J.L. Geneva, N.Y. : New York (State), Agricultural Experiment Station, Geneva. New York's food and life sciences bulletin. 1983. 1983. (102). 6 p. ill., maps. (NAL Call No.: S95.E22).

1529

**Persistence and toxicity of chlorpyrifos-methyl in cornmeal.**

GENSAB. Highland, H.A. Simonaitis, R.A.; Boatright, R.E. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 82-86. Includes references. (NAL Call No.: DNAL QL461.G4).

1530

**Pesticide regulatory decisions: production efficiency, equity, and interdependence.**

Osteen, C. Kuchler, F. New York : John Wiley. Agribusiness, an international journal. Fall 1987. v. 3 (3). p. 307-322. Includes references. (NAL Call No.: DNAL HD1401.A56).

## (PESTICIDES - GENERAL)

1531

**Pesticide use on selected crops: aggregated data, 1977-80.**

XAAIA. Ferguson, W.L. Washington, D.C. : The Department. Extract: U.S. farms applied an average 556 million pounds of pesticides in 354 million acre-treatments on 175 million acres of field, fruit, and vegetable crops annually from 1977 to 1980. These figures are based on reported pesticide use in surveys completed in various years and do not include all of the above crops in any year surveyed. Because planted acreage showed minimal annual change, general pesticide use per planted acre probably did not vary much from year to year. However, this may not be true for specific pesticides. Herbicides constituted 68 percent of the acre-treatments, insecticides 26 percent, fungicides 4 percent, and all other pesticides 2 percent. Field crops accounted for 89 percent of the acre-treatments, fruits 6 percent, and vegetables 5 percent. Although field corn and soybean farmers accounted for 68 percent of the acre-treatments, the intensity of application was lower for these crops than for other surveyed crops. Agriculture information bulletin - U.S. Dept. of Agriculture. Available from NTIS, order no. PB85-227882/AS. June 1985. (494). 25 p. Includes 24 references. (NAL Call No.: DNAL 1 AG84AB).

1532

**Physiological influences of fenoxaprop on corn (Zea mays).**

PCBPB. Snipes, C.E. Street, J.E.; Luthe, D.S. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. July 1987. v. 28 (3). p. 333-340. Includes references. (NAL Call No.: DNAL SB951.P49).

1533

**Physiological responses of corn (Zea mays) to AC 243,997 in combination with valine, leucine, and isoleucine.**

PCBPB. Shaner, D.L. Reider, M.L. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Apr 1987. v. 25 (2). p. 248-257. Includes references. (NAL Call No.: DNAL SB951.P49).

1534

**Physiological responses to fluazifop-butyl in tissue of corn (Zea mays) and soybean (Glycine max).**

WEESA6. Peregoy, R.S. Glenn, S. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 443-446. Includes 25 references. (NAL Call No.: DNAL 79.8 W41).

1535

**Phytotoxicity and adsorption of chlorsulfuron as affected by soil properties.**

WEESA6. Mersie, W. Foy, C.L. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 564-568. Includes 21 references. (NAL Call No.: DNAL 79.8 W41).

1536

**Plant availability of bound anilazine residues in a degraded loess soil.**

JPFCD2. Kloskowski, R. Fuhr, F.; Mittelstaedt, W. New York, N.Y. : Marcel Dekker. Journal of environmental science and health. Part B. Pesticides, food contaminants, and agricultural wastes. 1986. v. 21 (6). p. 487-505. Includes references. (NAL Call No.: DNAL TD172.U61).

1537

**Potential bans of corn and soybean pesticides: economic implications for farmers and consumers.**

Osteen, C. Kuchler, F. Washington, D.C. : The Department. Extract: Removing corn and soybean pesticides with alleged environmental and safety risks from the market could increase U.S. agricultural production costs, crop prices, farm incomes, and consumer expenditures, causing farmers to gain and consumers to lose. Banning all triazines, acetanilides, soil insecticides, or seed treatments would have the largest effects. This report uses an econometric--simulation model, incorporating relatively new developments in welfare economics, to analyze the economic implications of potential bans of corn and soybean insecticides, nematocides, fungicides, and herbicides through cost and yield assessments. Banning an individual corn or soybean pesticide would not significantly affect crop production, but banning all pesticides used for an important pest problem would have substantial effects. This study also demonstrates the interdependence among pesticide regulatory decisions. Agriculture economic report - United States Dept. of Agriculture. Apr 1986. (546). 23 p. Includes 21 references. (NAL Call No.: DNAL AGE A281.9 AG8A).

1538

**R-25788 as an antidote for SC-0774 in corn.**

PNWSB. Devlin, R.M. Koszanski, Z.K. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 74-77. Includes references. (NAL Call No.: DNAL 79.9 N814).

1539

**R-25788 effects on chlorsulfuron injury and acetohydroxyacid synthase activity.**  
 WEESA6. Rubin, B. Casida, J.E. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 462-468. Includes 24 references. (NAL Call No.: DNAL 79.8 W41).

1540

**Reciprocal antagonism between the herbicides, diclofop-methyl and 2,4-d, in corn and soybean tissue culture.**

PLPHA. Shimabukuro, R.H. Walsh, W.C.; Hoerauf, R.A. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Mar 1986. v. 80 (3). p. 612-617. ill. Includes 24 references. (NAL Call No.: DNAL 450 P692).

1541

**The relative phytotoxicity of selected hydrocarbon and oxygenated solvents and oils.**

Krenek, M.R. King, D.N. Philadelphia, PA : ASTM, c1987. Pesticide formulations and application systems : sixth volume : a symposium sponsored by ASTM Committee E-35 on Pesticides, Bal Harbour, FL, 6-7 Nov. 1985 / David I.B. Vander Hooven, Larry D. Spicer, editors. p. 3-19. Includes references. (NAL Call No.: DNAL SB950.93.P47 1987).

1542

**Researching Treflan carryover.**

Lueschen, W.E. St. Paul : University of Minnesota, Office of Special Programs, 1983. Soils, Fertilizer and Agricultural Pesticides Short Course : proceedings : December 13-14, 1983 / presented by the University of Minnesota Institute of Agriculture, Forestry and Home Economics ... et al. . p. 86-91. (NAL Call No.: DNAL S631.3.S65 1983).

1543

**Responses and residues in sugarbeets, soybeans, and corn irrigated with 2,4-D or silvex treated water (by V.F. Bruns, B.L. Carlile, and A.D. Kelley).** --.

Bruns, V. F. (Victor Friedrich). Washington, D.C. Agricultural Research Service, U.S. Dept. of Agriculture 1973. 31 p. : ill. --. Bibliography: p. 30-31. (NAL Call No.: Fiche S-69 no.1476).

1544

**The role of chloroplast development in nuclear gene expression.**

Taylor, W.C. Mayfield, S.P.; Martineau, B. New York : Alan R. Liss. UCLA symposia on molecular and cellular biology. Paper presented at the "Symposium on Molecular Biology of Development," April 1-7, 1984, Steamboat Springs, Colorado. 1984. v. 19. p. 601-610. ill. Includes 23 references. (NAL Call No.: DNAL QH506.U34).

1545

**Safening corn against chlorsulfuron and DPX-T6376 injury.**

SWSPB. Mersie, W. Foy, C.L. Champaign : The Society. Proceedings - Southern Weed Science Society. Jan 17-19, 1984. (37th). p. 328-334. ill. Includes 4 references. (NAL Call No.: DNAL 79.9 S08).

1546

**Simulated regional variations in pesticide runoff.**

JEVQAA. Haith, D.A. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1986. v. 15 (1). p. 5-8. ill. Includes references. (NAL Call No.: DNAL QH540.U6).

1547

**Some physiological effects of AC-252,214 on several plant growth systems.**

PNWSB. Devlin, R.M. Koszanski, Z.K. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1986. v. 40. p. 99-103. Includes references. (NAL Call No.: DNAL 79.9 N814).

1548

**Stereochemical aspects of the biosynthesis of the side chain of 9 beta, 19-cyclopropyl sterols in maize seedlings treated with tridemorph.**

PLPHA. Bladocha, M. Benveniste, P. Rockville, Md. : American Society of Plant Physiologists. Plant physiology. Dec 1985. v. 79 (4). p. 1098-1106. Includes 30 references. (NAL Call No.: DNAL 450 P692).

1549

**Tolerance of corn hybrids to Eptam and Eradicane.**

Poneleit, C.G. Rieck, C.E.; Carringer, R.D.; Wright, T.H. Lexington, Ky. : The Service. Agronomy notes - University of Kentucky, College of Agriculture, Cooperative Extension Service. Includes statistical data. Feb 1975.

## **(PESTICIDES - GENERAL)**

v. 8 (2). 6 p. (NAL Call No.: DNAL S596.7.A47).

**1550**

### **Tridiphane**

**2-(3,5-dichlorophenyl)-2-(2,2,2-trichloroethyl)oxirane an atrazine synergist: enzymatic conversion to a potent glutathione S-transferase inhibitor.**

PCBPB. Lamoureux, G.L. Rusness, D.G. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Dec 1986. v. 26 (3). p. 323-342. Includes 40 references. (NAL Call No.: DNAL SB951.P49).

**1551**

### **Weed control projects. I. Corn.**

Ritter, R.L. College Park, Md. : The Service. The Agronomist - Cooperative Extension Service, University of Maryland. Dec 1984. v. 21 (12). p. 17-18. (NAL Call No.: DNAL S71.A46).

**1552**

### **1980 pesticide use on field corn in the Corn Belt /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, United States Department of Agriculture, 1982. "January 1982.". iii, 30 p. : ill., map ; 28 cm. --. Bibliography: p. 26. (NAL Call No.: DNAL aSB950.2.A14N5).

**1553**

### **1980 pesticide use on field corn in the Lake States /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, United States Department of Agriculture, 1982. "January 1982.". iii, 23 p. : map ; 28 cm. --. Bibliography: p. 19. (NAL Call No.: DNAL aSB950.2.A14N52).

**1554**

### **1980 pesticide use on field corn in the major producing states /by Michael Hanthorn ... et al. . --.**

Hanthorn, Michael. Washington, D.C. : Natural Resource Economics Division, Economic Research Service, U.S. Dept. of Agriculture, 1982. "February 1982.". iii, 33 p. : map ; 28 cm. --. Bibliography: p. 28. (NAL Call No.: DNAL aSB191.M2N3).

# SOIL BIOLOGY

1555

**Bioassay rating system for predicting mortality of moribund corn rootworm (Coleoptera:Chrysomelidae) larvae following exposure to insecticide-treated soil.**  
JEENAI. Monke, B.J. Mayo, Z.B.; Ball, H.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1985. v. 78 (2). p. 467-470. Includes references. (NAL Call No.: DNAL 421 J822).

1556

**Characterization of microorganisms in soils exhibiting accelerated pesticide degradation.**  
BECTA. Reed, J.P. Kremer, R.J.; Keaster, A.J. New York, N.Y. : Springer-Verlag. Bulletin of environmental contamination and toxicology. Nov 1987. v. 39 (5). p. 776-782. Includes references. (NAL Call No.: DNAL RA1270.P35A1).

1557

**Degradation of atrazine by Pseudomonas: N-dealkylation and dehalogenation of atrazine and its metabolites.**  
JAFCAU. Behki, R.M. Khan, S.U. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1986. v. 34 (4). p. 746-749. Includes references. (NAL Call No.: DNAL 381 J8223).

1558

**Effects of fresh and decomposing corn plant residue extracts on corn seedling development (Phytotoxic chemicals, leaching, Zea mays).**  
Yakle, G.A. Cruse, R.M. Madison, Wis. : The Society. Journal - Soil Science Society of America. Sept/Oct 1984. v. 48 (5). p. 1143-1146. ill. Includes 16 references. (NAL Call No.: 56.9 S03).

1559

**The end of corn rootworm.**  
DeVault, G. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. Feb 1986. v. 8 (2). p. 25-28. ill. (NAL Call No.: DNAL S1.N32).

1560

**Environmental effects of metsulfuron and chlorsulfuron bioactivity in soil.**  
JEVQAA. Anderson, R.L. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1985. v. 14 (4). p. 517-521. Includes references. (NAL Call No.: DNAL QH540.J6).

1561

**Fate of nitrogen mineralized from nitrogen-15-labeled alfalfa in no-till, intercropped corn.**  
Jordan, D. Harris, D.; Rice, C.W.; Tiedje, J.M. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 60. Includes references. (NAL Call No.: DNAL SB203.R6).

1562

**Managing minimum-tillage fields, fertility, and soil type.**  
Thomas, G.W. Champaign, Ill. : Weed Science Society of America. Monograph series of the Weed Science Society of America. Literature review. 1985. (2). p. 211-226. Includes references. (NAL Call No.: DNAL SB610.M65).

1563

**Predator activity and predation in corn agroecosystems.**  
EVETEX. Brust, G.E. Stinner, B.R.; McCartney, D.A. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1986. v. 15 (5). p. 1017-1021. Includes references. (NAL Call No.: DNAL QL461.E532).

1564

**Use of radiographs for movement analysis of the corn wireworm, Melanotus communis (Coleoptera: Elateridae).**  
EVETEX. Villani, M.G. Gould, F. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 462-464. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

# SOIL CHEMISTRY AND PHYSICS

1565

## Chloride effects on corn.

CS0SA2. Parker, M.B. Gaines, T.P.; Gascho, G.J. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. Dec 1985. v. 16 (12). p. 1319-1333. Includes 20 references. (NAL Call No.: DNAL S590.C63).

1566

## Corn and soybean yield response to crop residue management under no-tillage production systems.

AGJ0AT. Wilhelm, W.W. Doran, J.W.; Power, J.F. Madison, Wis. : American Society of Agronomy. Agronomy journal. Jan/Feb 1986. v. 78 (1). p. 184-189. Includes references. (NAL Call No.: DNAL 4 AM34P).

1567

## Effect of cadmium- and zinc-treated sludge on yield and cadmium-zinc uptake of corn.

JEVQAA. Sikora, F.J. Wolt, J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1986. v. 15 (4). p. 341-345. Includes references. (NAL Call No.: DNAL QH540.U6).

1568

## Effect of humic acid on aluminum toxicity in corn plants.

S0SCAK. Tan, K.H. Binger, A. Baltimore, Md. : Williams & Wilkins. Soil science. Jan 1986. v. 141 (1). p. 20-25. ill. Includes references. (NAL Call No.: DNAL 56.8 S03).

1569

## Effect of physical and chemical profile modification on soybean and corn production.

SSSJD4. Hammel, J.E. Sumner, M.E.; Shahandeh, H. Madison, Wis. : The Society. Journal - Soil Science Society of America. Nov/Dec 1985. v. 49 (6). p. 1508-1511. ill. Includes references. (NAL Call No.: DNAL 56.9 S03).

1570

## Effect of soil pH on imazaquin and imazethapyr adsorption to soil and phytotoxicity to corn (Zea mays).

WEESA6. Renner, K.A. Meggitt, W.F.; Penner, D. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1988. v. 36 (1). p. 78-83. Includes references. (NAL Call No.: DNAL 79.8 W41).

1571

## Effects of controlled traffic in corn plots.

Sial, J.K. Marley S.J.; Erbach, D.C. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-1049). 24 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1572

## Effects of fresh and decomposing corn plant residue extracts on corn seedling development (Phytotoxic chemicals, leaching, Zea mays).

Yakle, G.A. Cruse, R.M. Madison, Wis. : The Society. Journal - Soil Science Society of America. Sept/Oct 1984. v. 48 (5). p. 1143-1146. ill. Includes 16 references. (NAL Call No.: 56.9 S03).

1573

## Effects of soybean and corn residue decomposition on soil strength and splash detachment.

SSSJD4. Gantzer, C.J. Buyanovsky, G.A.; Alberts, E.E.; Remley, P.A. Madison, Wis. : The Society. Soil Science Society of America journal. Jan/Feb 1987. v. 51 (1). p. 202-206. Includes references. (NAL Call No.: DNAL 56.9 S03).

1574

## Effects of tillage with controlled wheel traffic on soil properties and root growth of corn.

JSWCA3. Bauder, J.W. Randall, G.W.; Schuler, R.T. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. July/Aug 1985. v. 40 (4). p. 382-385. Includes 14 references. (NAL Call No.: DNAL 56.8 J822).

1575

## Environmental effects of metsulfuron and chlorsulfuron bioactivity in soil.

JEVQAA. Anderson, R.L. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1985. v. 14 (4). p. 517-521. Includes references. (NAL Call No.: DNAL QH540.U6).

1576

**Field duration of chlorsulfuron bioactivity in the Central Great Plains.**

JEVQAA. Anderson, R.L. Humburg, N.E. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. July/Sept 1987. v. 16 (3). p. 263-266. Includes references. (NAL Call No.: DNAL QH540.J6).

1577

**Influence of soil characteristics and environmental conditions on seasonal variations of water-soluble phosphate in soils.**

SOSSAK. Kuo, S. Jellum, E.J. Baltimore, Md. : Williams & Wilkins. Soil science. Apr 1987. v. 143 (4). p. 257-263. Includes references. (NAL Call No.: DNAL 56.8 S03).

1578

**Legume nitrogen transformation and recovery by corn as influenced by tillage.**

Varco, J.U. Frye, W.W.; Smith, M.S.; Grove, J.H. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 40. Includes references. (NAL Call No.: DNAL SB203.R6).

1579

**Long term compaction effect on soil and plant growth.**

Schuler, R.T. Lowery, B. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-1048). 21 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1580

**Managing minimum-tillage fields, fertility, and soil type.**

Thomas, G.W. Champaign, Ill. : Weed Science Society of America. Monograph series of the Weed Science Society of America. Literature review. 1985. (2). p. 211-226. Includes references. (NAL Call No.: DNAL SB610.M65).

1581

**Minespoil acidity and rowcrop productivity.**

JEVQAA. Dancer, W.S. Jansen, I.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. July/Sept 1987. v. 16 (3). p. 242-246. Includes references. (NAL Call No.: DNAL QH540.J6).

1582

**Molybdenum accumulation by corn and soybeans from a molybdenum-rich sewage sludge.**

JEVQAA. Pierzynski, G.M. Jacobs, L.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1986. v. 15 (4). p. 394-398. Includes references. (NAL Call No.: DNAL QH540.J6).

1583

**Movement of first-instar western corn rootworms (Coleoptera: Chrysomelidae) in soil.**

EVETEX. Strnad, S.P. Bergman, M.K. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1987. v. 16 (4). p. 975-978. Includes references. (NAL Call No.: DNAL QL461.E532).

1584

**No-till soybeans easier than no-till corn.**

Fee, R. Des Moines, Iowa : Meredith Corp. Successful farming. Feb 1986. v. 84 (4). p. 18-19. ill. (NAL Call No.: DNAL 6 SU12).

1585

**Peroxide coated seed emergence in water-saturated soil.**

AGJOAT. Langan, T.D. Pendleton, J.W.; Oplinger, E.S. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1986. v. 78 (5). p. 769-772. Includes references. (NAL Call No.: DNAL 4 AM34P).

1586

**Phytotoxicity and adsorption of chlorsulfuron as affected by soil properties.**

WEESA6. Mersie, W. Foy, C.L. Champaign, Ill. : Weed Science Society of America. Weed science. July 1985. v. 33 (4). p. 564-568. Includes 21 references. (NAL Call No.: DNAL 79.8 W41).

## **(SOIL CHEMISTRY AND PHYSICS)**

**1587**

**Plant availability of bound anilazine residues in a degraded loess soil.**

JPFCD2. Kloskowski, R. Fuhr, F.; Mittelstaedt, W. New York, N.Y. : Marcel Dekker. Journal of environmental science and health. Part B. Pesticides, food contaminants, and agricultural wastes. 1986. v. 21 (6). p. 487-505. Includes references. (NAL Call No.: DNAL TD172.J61).

**1588**

**Plant availability of phosphorus in sewage sludge compost.**

JEVQAA. McCoy, J.L. Sikora, L.J.; Weil, R.R. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1986. v. 15 (4). p. 403-409. Includes references. (NAL Call No.: DNAL QH540.J6).

**1589**

**A soil primer: compaction causes and effects.**

CRSOA. Voorhees, W.B. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Dec 1986. v. 40 (3). p. 8-9. (NAL Call No.: DNAL 6 W55).

**1590**

**Soil water depletion under crops on reclaimed and undisturbed soils.**

JEVQAA. Schroeder, S.A. Halvorson, G.A. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1988. v. 17 (1). p. 130-134. Includes references. (NAL Call No.: DNAL QH540.J6).

# SOIL FERTILITY - FERTILIZERS

1591

**Cadmium levels in soils and plants from some long-term soil fertility experiments in the United States of America.**  
JEVQAA. Mortvedt, J.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1987. v. 16 (2). p. 137-142. Includes references. (NAL Call No.: DNAL QH540.J6).

1592

**Chemical and physical enrichments of sediment from cropland.**  
Young, R.A. Olness, A.E.; Mutchler, C.K.; Moldenhauer, W.C. St. Joseph, Mich. : American Society of Agricultural Engineers, c1985. Erosion and soil productivity : proceedings of the National Symposium on Erosion and Soil Productivity, December 10-11, 1984, Hyatt Regency New Orleans, New Orleans, Louisiana. p. 107-116. Includes 17 references. (NAL Call No.: DNAL S624.A1N46 1984).

1593

**A comparative study of pith cell death in stalk internodes of corn grown on organic and conventional fields.**  
Kang, M.S. Greenbelt : Institute for Alternative Agriculture. American journal of alternative agriculture. Fall 1986. v. 1 (4). p. 165-168. Includes references. (NAL Call No.: DNAL S605.5.A43).

1594

**Comparison of residual effects of hairy vetch and rye cover crops on no-till sweet corn.**  
DeGregorio, R.E. Ashley, R.A. Madison : The Department. Progress report, clovers and special purpose legumes research - Univ. of Wisconsin, Dept. of Agronomy. 1986. v. 19. p. 19-21. Includes references. (NAL Call No.: DNAL SB193.P72).

1595

**Corn forage yield and chemical composition as influenced by sulfur fertilization.**  
CSOSA2. Buttrey, S.A. Allen, V.G.; Fontenot, J.P.; Reneau, R.B. Jr. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. Aug 1987. v. 18 (8). p. 875-895. Includes references. (NAL Call No.: DNAL S590.C63).

1596

**Crop response to soil application of phosphogypsum.**  
JEVQAA. Mays, D.A. Mortvedt, J.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1986. v. 15 (1). p. 78-81. Includes references. (NAL Call No.: DNAL QH540.J6).

1597

**Crop rotations and manure versus agricultural chemicals in dryland grain production.**  
JSWCA3. Sahs, W.W. Lesoing, G. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Nov/Dec 1984. v. 40 (6). p. 511-516. Includes 27 references. (NAL Call No.: DNAL 56.8 J822).

1598

**Division S-3-soil microbiology and biochemistry.**  
SSSJD4. Caly, D.E. Molina, J.A.E.; Clapp, C.E.; Linden, D.R. Madison, Wis. : The Society. Journal - Soil Science Society of America. Mar/Apr 1985. v. 49 (2). p. 322-325. ill. Includes references. (NAL Call No.: DNAL 56.9 S03).

1599

**The economics of nitrogen fertilization of corn under risk /by Richard A. Schoney. --.**  
Schoney, Richard A. Madison, Wis. : College of Agricultural and Life Sciences, 1978. "April, 1978.". 11 leaves ; 29 cm. --. Bibliography: leaf 10. (NAL Call No.: DNAL HD1401.W57 no.143).

1600

**Effect of cadmium- and zinc-treated sludge on yield and cadmium-zinc uptake of corn.**  
JEVQAA. Sikora, F.J. Wolt, J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1986. v. 15 (4). p. 341-345. Includes references. (NAL Call No.: DNAL QH540.J6).

1601

**Effect of phosphorus fertilization and liming on yield and chemical composition of corn, wheat, and red clover.**  
KAEBA. Doll, E.C. Miller, H.F.; Todd, J.R. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091.~ Includes statistical data. Apr 1963. (682). 23 p. Includes 11 references. (NAL Call No.: DNAL

## (SOIL FERTILITY - FERTILIZERS)

100 K41 (2)).

1602

**Effect of tillage on residual nitrogen availability from alfalfa to succeeding corn crops.**

AGJDAT. Levin, A. Beegle, D.B.; Fox, R.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. Jan/Feb 1987. v. 79 (1). p. 34-38. Includes references. (NAL Call No.: DNAL 4 AM34P).

1603

**The effect of wheat straw mulch on weed control and corn growth /by Donald A. Crutchfield.**

Crutchfield, Donald A. 1984. Thesis (Ph. D.)--University of Nebraska, 1984. 184 leaves : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: DNAL DISS 84-28,205).

1604

**Effects of soil, soil treatment, seasonal variation, and variety on yield and composition of corn crops grown on Kentucky soil fertility plots.**

KAEB. Weeks, M.E. Fergus, E.N. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. May 1946. (485). 52 p. Includes 14 references. (NAL Call No.: DNAL 100 K41 (2)).

1605

**Evaluation of nitrogen availability indexes for a sludge compost amended soil.**

JEVQAA. O'Keefe, B.E. Axley, J.; Meisinger, J.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1986. v. 15 (2). p. 121-128. Includes references. (NAL Call No.: DNAL QH540.J6).

1606

**Influence of soil characteristics and environmental conditions on seasonal variations of water-soluble phosphate in soils.**

SDSCAK. Kuo, S. Jellum, E.J. Baltimore, Md. : Williams & Wilkins. Soil science. Apr 1987. v. 143 (4). p. 257-263. Includes references. (NAL Call No.: DNAL 56.8 SD3).

1607

**The influence of Zn on the yield and chemical composition of corn grown on Iberia silty clay.**

Sedberry, J.E. Jr. Bligh, D.P.; Curtis, O.D.; Devillier, J.E. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1986? . p. 191-192. (NAL Call No.: DNAL 100 L936).

1608

**Look for nitrogen deficiency on corn now.**

Gerwing, J. Brookings, S.D. : The Department. Field facts : soils, insects, diseases, weeds, crops - South Dakota State University, Cooperative Extension, Plant Science Department. July 1, 1987. v. 2 (13). p. 1. (NAL Call No.: DNAL S596.7.F44).

1609

**Manure injection can sometimes injure corn crop.**

CRSOA. Schmitt, M.A. Hoeft, R.G. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. June/July 1986. v. 38 (8). p. 19-22. ill. (NAL Call No.: DNAL 6 W55).

1610

**Metal accumulation in corn and barley grown on a sludge-amended Typic Ochraqualf.**

JEVQAA. Rappaport, B.D. Martens, D.C.; Reneau, R.B. Jr.; Simpson, T.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1987. v. 16 (1). p. 29-33. Includes references. (NAL Call No.: DNAL QH540.J6).

1611

**Metal availability in sludge-amended soils with elevated metal levels.**

JEVQAA. Rappaport, B.D. Martens, D.C.; Reneau, R.B. Jr.; Simpson, T.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1988. v. 17 (1). p. 42-47. Includes references. (NAL Call No.: DNAL QH540.J6).

1612

**Molybdenum accumulation by corn and soybeans from a molybdenum-rich sewage sludge.**

JEVQAA. Pierzynski, G.M. Jacobs, L.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1986. v. 15 (4). p. 394-398. Includes references. (NAL Call No.: DNAL QH540.J6).

1613

**Morphological and anatomical characterization of leaf burn in corn induced from foliar-applied nitrogen.**

AGJDAT. Gamble, P.E. Emino, E.R. Madison, Wis. : American Society of Agronomy. Agronomy journal. Jan/Feb 1987. v. 79 (1). p. 92-96. ill. Includes references. (NAL Call No.: DNAL 4 AM34P).

1614

**Nitrogen availability to corn in soils previously amended with organic wastes.**

CSDSA2. Ruby, T.P. Griffin, G.F. New York, N.Y. : Marcel Dekker. Communications in soil science and plant analysis. June 1985. v. 16 (6). p. 569-581. Includes 17 references. (NAL Call No.: DNAL S590.C63).

1615

**Nitrogen recovery by no-till and conventional till corn from cover crops.**

Varco, J.J. Frye, W.W.; Smith, M.S. Athens, Ga. : Agricultural Experiment Stations, University of Georgia, 1985? . Proceedings of the 1985 Southern Region No-Till Conference : July 16-17, 1985, Griffin, Georgia / edited by W.L. Hargrove and F.C. Boswell and G.W. Langdale. p. 127-131. Includes references. (NAL Call No.: DNAL S604.S6 1985).

1616

**Nitrogen utilization from fertilizer and legume residues in legume-corn rotations.**

AGJDAT. Hesterman, O.B. Russelle, M.P.; Sheaffer, C.C.; Heichel, G.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1987. v. 79 (4). p. 726-731. Includes references. (NAL Call No.: DNAL 4 AM34P).

1617

**No-tillage intercropped corn production in tall fescue sod as affected by sod-control and nitrogen fertilization.**

AGJDAT. Wilkinson, S.R. Devine, D.J.; Belesky, D.P.; Dobson, J.W. Jr.; Dawson, R.N. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1987. v. 79 (4). p. 685-690. Includes references. (NAL Call No.: DNAL 4 AM34P).

1618

**Plant availability of phosphorus in sewage sludge compost.**

JEVQAA. McCoy, J.L. Sikora, L.J.; Weil, R.R. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Dec/Dec 1986. v. 15 (4). p. 403-409. Includes references.

(NAL Call No.: DNAL QH540.J6).

1619

**Purpling in maize hybrids as influenced by temperature and soil phosphorus.**

AGJDAT. Cobbina, J. Miller, M.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1987. v. 79 (3). p. 576-582. Includes references. (NAL Call No.: DNAL 4 AM34P).

1620

**Relationships among anaerobically mineralized nitrogen chemical indexes, and nitrogen availability to corn (Determination of soil fertility, Zea mays).**

Fox, R.H. Piekielek, W.P. Madison, Wis. : The Society. Journal - Soil Science Society of America. Sept/Oct 1984. v. 48 (5). p. 1087-1090. ill. Includes 19 references. (NAL Call No.: 56.9 SD3).

1621

**Relative phytotoxicity of dicyandiamide and availability of its nitrogen to cotton, corn, and grain sorghum.**

SSSJD4. Reeves, D.W. Touchton, J.T. Madison, Wis. : The Society. Soil Science Society of America journal. Sept/Oct 1986. v. 50 (5). p. 1353-1357. Includes references. (NAL Call No.: DNAL 56.9 S03).

1622

**Residual effect of heavy applications of animal manures on corn growth and yield and on soil properties.**

MXMRA. Evans, S.D. Goodrich, P.R.; Munter, R.C. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1985. (2,rev.). p. 58-59. (NAL Call No.: DNAL S1.M52).

1623

**Residual effect of heavy applications of animal manures on corn growth and yield and on soil properties.**

MXMRA. Evans, S.D. Goodrich, P.R.; Munter, R.C. St. Paul, Minn. : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. Includes statistical data. 1986. (2,rev.). p. 63-64. (NAL Call No.: DNAL S1.M52).

## **(SOIL FERTILITY - FERTILIZERS)**

**1624**

**A simple method for production of Glomus aggregatum inoculum using controlled-release fertilizer.**

HUHS.A. Coltman, R.R. Waterer, D.R.; Huang, R.S. Alexandria, Va. : American Society for Horticultural Science. HortScience. Feb 1988. v. 23 (1). p. 213-215. Includes references. (NAL Call No.: DNAL SB1.H6).

**1625**

**Solubility characteristics of residual phosphate in a fertilized and limed Ultisol.**

SSSJD4. Harrison, R.B. Adams, F. Madison, Wis. : The Society. Soil Science Society of America journal. July/Aug 1987. v. 51 (4). p. 963-969. Includes references. (NAL Call No.: DNAL 56.9 S03).

**1626**

**Uptake of nitrogen from soil, fertilizer, and crop residues by no-till corn and soybean.**

SSSJD4. Power, J.F. Doran, J.W.; Wilhelm, W.W. Madison, Wis. : The Society. Journal - Soil Science Society of America. Jan/Feb 1986. v. 50 (1). p. 137-142. Includes references. (NAL Call No.: DNAL 56.9 S03).

**1627**

**Zinc deficiency showing this year.**

Gerwing, J. Brookings, S.D. : The Department. Field facts : soils, insects, diseases, weeds, crops - South Dakota State University, Cooperative Extension, Plant Science Department. June 10, 1987. v. 2 (10). p. 1. (NAL Call No.: DNAL S596.7.F44).

# SOIL CULTIVATION

1628

## **An alternate school of thought.**

CRSOA. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. June/July 1987. v. 39 (8). p. 25-26. (NAL Call No.: DNAL 6 W55).

1629

## **Aspects of the field biology of the blackfaced leafhopper (Homoptera: Cicadellidae) in corn and pastures in Kentucky.**

JEENAI. Sedlacek, J.D. Freytag, P.H. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1986. v. 79 (3). p. 605-613. Includes references. (NAL Call No.: DNAL 421 J822).

1630

## **Behavior and survival of Heliothis zea (Lepidoptera: Noctuidae) prepupae in no-tillage and conventional-tillage corn.**

EVETEX. Landis, D.A. Bradley, J.R. Jr.; Gould, F. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1987. v. 16 (1). p. 94-99. Includes references. (NAL Call No.: DNAL QL461.E532).

1631

## **Conservation tillage demonstration in southeastern Minnesota--1985.**

MXMRA. Moncrief, J.F. Wagar, T.L.; Brietbach, D.D.; O'Leary, M.J.; Breitenbach, F.R.; Ostlie, K.R. St. Paul, Minn. : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. Includes statistical data. 1986. (2,rev). p. 276-285. (NAL Call No.: DNAL S1.M52).

1632

## **Contributions of ground cover, dry matter, and nitrogen from intercrops and cover crops in a corn polyculture system.**

AGJOAT. Scott, T.W. Mt Pleasant, J.; Burt, R.F.; Otis, D.J. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1987. v. 79 (5). p. 792-798. Includes references. (NAL Call No.: DNAL 4 AM34P).

1633

## **Corn and soybean yield response to crop residue management under no-tillage production systems.**

AGJOAT. Wilhelm, W.W. Doran, J.W.; Power, J.F. Madison, Wis. : American Society of Agronomy. Agronomy journal. Jan/Feb 1986. v. 78 (1). p. 184-189. Includes references. (NAL Call No.: DNAL 4 AM34P).

1634

## **Corn response to subsoiling and nematicide application.**

JONEB. Rich, J.R. Johnson, J.T.; Hodge, C.H. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Oct 1985. v. 17 (4). p. 404-407. Includes 14 references. (NAL Call No.: DNAL QL391.N4J62).

1635

## **Crop rotations and manure versus agricultural chemicals in dryland grain production.**

JSWCA3. Sahs, W.W. Lesoing, G. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Nov/Dec 1984. v. 40 (6). p. 511-516. Includes 27 references. (NAL Call No.: DNAL 56.8 J822).

1636

## **Degradation of terbufos (Counter) soil insecticide in corn fields under conservation tillage practices.**

BECTA. Felsot, A.S. Bruce, W.N.; Steffey, K.S. New York, N.Y. : Springer-Verlag. Bulletin of environmental contamination and toxicology. Mar 1987. v. 38 (3). p. 369-376. Includes references. (NAL Call No.: DNAL RA1270.P35A1).

1637

## **Economic analyses of monocultured and maize-rotated soybean crops grown on southern root-knot nematode infested soil.**

Kinloch, R.A. Hewitt, T.D. S.I. : The Society. Proceedings - Soil and Crop Science Society of Florida. 1984. v. 43. p. 172-174. Includes references. (NAL Call No.: DNAL 56.9 S032).

1638

## **The effect of row cultivation on runoff, soil loss and corn grain yield.**

McIsaac, G.F. Mitchell, J.K.; Siemens, J.C.; Hummel, J.W. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-2036). 14 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

## (SOIL CULTIVATION)

1639

**Effect of tillage on residual nitrogen availability from alfalfa to succeeding corn crops.**  
AGJDAT. Levin, A. Beegle, D.B.; Fox, R.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. Jan/Feb 1987. v. 79 (1). p. 34-38. Includes references. (NAL Call No.: DNAL 4 AM34P).

1640

**The effectiveness of cultivation as a control for the corn earworm /by G.W. Barber and F.F. Dicke.**  
Barber, George W. 1890-1948. Dicke, F. F. 1899-. Washington : U.S. Dept. of Agriculture, 1937. Caption title. 16 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84Te no.561).

1641

**Effects of tillage with controlled wheel traffic on soil properties and root growth of corn.**  
JSWCA3. Bauder, J.W. Randall, G.W.; Schuler, R.T. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. July/Aug 1985. v. 40 (4). p. 382-385. Includes 14 references. (NAL Call No.: DNAL 56.8 J822).

1642

**The enemies hypothesis: tritrophic interactions and vegetational diversity in tropical agroecosystems.**  
ECOLA. Letourneau, D.K. Tempe, Ariz : Ecological Society of America. Ecology : a publication of the Ecological Society of America. Dec 1987. v. 68 (6). p. 1616-1622. ill. Includes references. (NAL Call No.: DNAL 410 EC7).

1643

**Extended diapause: Northern corn rootworm adapts to crop rotation.**  
CRSDA. Ostlie, K.R. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. June/July 1987. v. 39 (8). p. 23-25. maps. (NAL Call No.: DNAL 6 W55).

1644

**Fall, spring spraying works with sod (Atrazine, paraquat, no-till maize).**  
Waukesha, Wis. : No-Till Farmer, Inc. No-till farmer. Oct 1984. v. 13 (10). p. 8. ill. (NAL Call No.: S604.N6).

1645

**Farming without chemicals (Rotation of oats/legumes and grasses-hay-maise-soybeans-maize, organic farming, Iowa).**  
Thompson, D. Thompson, S. Washington : Office of Public Awareness. EPA Environmental Protection Agency journal. June 1984. v. 10 (5). p. 33-34. ill. (NAL Call No.: TD171.U5).

1646

**A guide to no-till planting after corn or soybeans.**  
Griffith, D.R. Mannering, J.V.; Mengel, D.B.; Parsons, S.D.; Bauman, T.T.; Scott, D.H.; Edwards, C.R.; Turpin, F.T.; Doster, D.H. West Lafayette, Ind. : The Service. Publication ID - Cooperative Extension Service, Purdue University. Dec 1982. (154). 11 p. ill. (NAL Call No.: DNAL 275.29 IN2ID).

1647

**A guide to till-planting for corn and soybeans in Indiana.**  
Griffith, D.R. Mannering, J.V.; Mengel, D.B.; Parsons, S.D.; Bauman, T.T.; Scott, D.H.; Turpin, F.T.; Doster, D.H. West Lafayette, Ind. : The Service. Publication ID - Cooperative Extension Service, Purdue University. Jan 1982. (ID 148). 8 p. (NAL Call No.: DNAL 275.29 IN2ID).

1648

**Herbicide evaluations for no-till soybean (Glycine max) production in corn (Zea mays) residue.**  
WEESA6. Moomaw, R.S. Martin, A.R. Champaign, Ill. : Weed Science Society of America. Weed science. Sept 1985. v. 33 (5). p. 679-685. Includes 17 references. (NAL Call No.: DNAL 79.8 W41).

1649

**Herbicide performance with different tillage systems.**  
Siemens, J.C. McGlamery, M.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, Summer 1985. (fiche no. 85-1010). 16 p. (NAL Call No.: DNAL FICHE 290.9 AM32P).

1650

**Influence of tillage and crop rotation on soybean yields and cyst nematode population.**  
Thulow, D.L. Edwards, J.H.; Gazaway, W.; Eason, J.T. Athens, Ga. : Agricultural Experiment Stations, University of Georgia, 1985? . Proceedings of the 1985 Southern Region No-Till Conference : July 16-17, 1985, Griffin, Georgia / edited by W.L. Hargrove and F.C. Boswell and G.W. Langdale. p. 45-49. Includes 4 references. (NAL Call No.: DNAL S604.S6 1985).

1651

**Influence of tillage and western and northern corn rootworm (Coleoptera: Chrysomelidae) egg populations on larval populations and root damage.**  
JEENAI. Gray, M.E. Tollefson, J.J. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1987. v. 80 (4). p. 911-915. Includes references. (NAL Call No.: DNAL 421 J822).

1652

**Influence of tillage methods on *Pratylenchus* spp. in two soil types.**  
PLDRA. Bergeson, G.B. Ferris, J.M. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1986. v. 70 (4). p. 326-328. Includes 12 references. (NAL Call No.: DNAL 1.9 P69P).

1653

**Influence of tillage on development of gray leaf spot and number of airborne conidia of *Cercospora zeae-maydis*.**  
PLDRA. Payne, G.A. Duncan, H.E.; Adkins, C.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1987. v. 71 (4). p. 329-332. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1654

**Keep cover crops and plow them, too.**  
Zahradnik, F. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. Feb 1986. v. 8 (2). p. 18-21. ill. (NAL Call No.: DNAL S1.N32).

1655

**Listing leaves herbicides behind.**  
Cramer, C. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. May/June 1987. v. 9 (4). p. 38-40. ill. (NAL Call No.: DNAL S1.N32).

1656

**Maize yields and soil loss with conservation and conventional tillage practices on a tropical Aridisol.**  
Fahrney, K.S. El-Swaify, S.A.; Lo, A.K.F.; Joy, R.J. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 138-140. Includes references. (NAL Call No.: DNAL SB203.R6).

1657

**Managing corn residue to control soil and nutrient losses (Runoff, simulated rainfall plots, conservation tillage).**  
Mickelson, S.K. Baker, J.L.; Laflen, J.M. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-2161). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1658

**Managing minimum-tillage fields, fertility, and soil type.**  
Thomas, G.W. Champaign, Ill. : Weed Science Society of America. Monograph series of the Weed Science Society of America. Literature review. 1985. (2). p. 211-226. Includes references. (NAL Call No.: DNAL SB610.M65).

1659

**Movement and germination of weed seeds in ridge-till crop production systems.**  
WEESA6. Forcella, F. Lindstrom, M.J. Champaign, Ill. : Weed Science Society of America. Weed science. Jan 1988. v. 36 (1). p. 56-59. ill. Includes references. (NAL Call No.: DNAL 79.8 W41).

1660

**Nitrogen utilization from fertilizer and legume residues in legume-corn rotations.**  
AGJOAT. Hesterman, D.B. Russell, M.P.; Sheaffer, C.C.; Heichel, G.H. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1987. v. 79 (4). p. 726-731. Includes references. (NAL Call No.: DNAL 4 AM34P).

## (SOIL CULTIVATION)

1661

**No-till soybeans easier than no-till corn.**  
Fee, R. Des Moines, Iowa : Meredith Corp.  
Successful farming. Feb 1986. v. 84 (4). p.  
18-19. ill. (NAL Call No.: DNAL 6 SU12).

1662

**No-tillage intercropped corn production in tall fescue sod as affected by sod-control and nitrogen fertilization.**

AGJOAT. Wilkinson, S.R. Devine, O.J.; Belesky, D.P.; Dobson, J.W. Jr.; Dawson, R.N. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1987. v. 79 (4). p. 685-690. Includes references. (NAL Call No.: DNAL 4 AM34P).

1663

**Northern and western corn rootworm (Coleoptera: Chrysomelidae) oviposition in corn as influenced by foxtail populations and tillage systems.**

JEENAI. Johnson, T.B. Turpin, F.T. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1985. v. 78 (1). p. 57-60. Includes references. (NAL Call No.: DNAL 421 J822).

1664

**Pathogenicity and reproduction of *Pratylenchus agilis* in field microplots of soybeans, corn, tomato, or corn-soybean cropping systems.**

PLDRA. Rebois, R.V. Golden, A.M. St. Paul, Minn. : American Phytopathological Society. Plant disease. Nov 1985. v. 69 (11). p. 927-929. ill. Includes 12 references. (NAL Call No.: DNAL 1.9 P69P).

1665

**Principles of weed control for reduced-tillage corn production.**

Triplett, G.B. Jr. Champaign, Il. : Weed Science Society of America. Monograph series of the Weed Science Society of America. 1985. (2). p. 26-40. Includes references. (NAL Call No.: DNAL SB610.M65).

1666

**Production guidelines for growing corn, grain sorghum, and soybeans with conservation tillage in South Carolina.**

Palmer, J.H. Zublena, J.P.; Murdock, E.C.; Nolan, C.N.; Griffin, R.P.; Manley, D.; Chapin, J.W.; Smith, F.H.; Krausz, J.P.; Wolak, F.W. Clemson, S.C. : The Service. Circular - Clemson University, Cooperative Extension Service. Jan 1985. (539.rev.). 28 p. (NAL Call No.: DNAL 275.29 S08E).

1667

**Reduced tillage: are there hidden disease problems?.**

CRSOA. Johanson, K.L. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Feb 1987. v. 39 (5). p. 16-17. ill. (NAL Call No.: DNAL 6 W55).

1668

**Reduced tillage systems: How they compare.**

AGENA. Hummel, J.W. Wax, L.M.; Siemens, J.C. St. Joseph, Mich. : American Society of Agricultural Engineers. Agricultural engineering. Sept 1985. v. 66 (9). p. 18-19. ill. (NAL Call No.: DNAL 58.8 AG83).

1669

**The relative risk efficiencies of alternative tillage practices for irrigated corn production.**

Tew, B.V. Rafsnider, G.T.; Lybecker, D.W.; Chapman, P.L. West Lafayette, Ind. : Purdue University. North Central journal of agricultural economics. Jan 1986. v. 8 (1). p. 83-91. Includes 29 references. (NAL Call No.: DNAL HD1773.A3N6).

1670

**The relative risk efficiencies of alternative tillage practices for irrigated corn production.**

Tew, B.V. Rafsnider, G. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-2531). 19 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1671

**Researching Treflan carryover.**

Lueschen, W.E. St. Paul : University of Minnesota, Office of Special Programs, 1983. Soils, Fertilizer and Agricultural Pesticides Short Course : proceedings : December 13-14, 1983 / presented by the University of Minnesota Institute of Agriculture, Forestry and Home Economics ... et al. . p. 86-91. (NAL Call No.: DNAL S631.3.S65 1983).

## (SOIL CULTIVATION)

1672

**Response of no-tillage corn grown in corn and soybean residues to several nitrogen fertilizer sources.**

AGJ0AT. Eckert, D.J. Dick, W.A.; Johnson, J.W. Madison, Wis. : American Society of Agronomy. Agronomy journal. Mar/Apr 1986. v. 78 (2). p. 231-235. Includes references. (NAL Call No.: DNAL 4 AM34P).

1673

**Ridge planting: A system for the future.**

CRSDA. Randall, G.W. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Aug/Sept 1987. v. 39 (9). p. 6-8. ill. (NAL Call No.: DNAL 6 W55).

1674

**Role of intercropped red clover in inhibiting European corn borer (Lepidoptera: Pyralidae) damage to corn in eastern Ontario.**

JEENAI. Lambert, J.D.H. Arnason, J.T.; Serratos, A.; Philogene, B.U.R.; Faris, M.A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1987. v. 80 (6). p. 1192-1196. Includes references. (NAL Call No.: DNAL 421 J822).

1675

**Seed corn growers concerned about wind erosion.**

Herceg, A.G. Washington, D.C. : The Service. Soil & water conservation news - United States Dept. of Agriculture, Soil Conservation Service. Oct 1986. v. 7 (7). p. 8. ill. (NAL Call No.: DNAL aS622.S6).

1676

**Seedcorn maggots (Diptera: Anthomyiidae) and slugs in conservation tillage systems in Ohio.**

JEENAI. Hammond, R.B. Stinner, B.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1987. v. 80 (3). p. 680-684. Includes references. (NAL Call No.: DNAL 421 J822).

1677

**Short- and long-term cost comparisons of conventional and conservation tillage systems in corn production.**

JSWCA3. Mueller, D.H. Klemme, R.M.; Daniel, T.C. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Sept/Oct 1985. v. 40 (5). p. 466-470. Includes 29 references. (NAL Call No.: DNAL 56.8 J822).

1678

**Soybean and maize cropping models for the management of Meloidogyne incognita in the coastal plain.**

JONEB. Kinloch, R.A. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Oct 1986. v. 18 (4). p. 451-458. Includes references. (NAL Call No.: DNAL QL391.N4J62).

1679

**A stochastic dominance comparison of reduced tillage systems in corn and soybean production under risk.**

Klemme, R.M. Ames, Iowa : American Agricultural Economics Association. Extract: Returns per acre of reduced tillage systems including conventional, chisel, till-plant, and no-till are examined under general assumptions concerning risk. These returns are calculated using corn and soybean experimental plot yields. Stochastic dominance rankings indicate an advantage (second degree) of conventional and chisel over no-till when soil loss costs are not assigned. Annual per acre soil loss costs of \$5-15 shift rankings towards the reduced tillage systems. A \$10 per acre cost results from corn yield losses of 0.06% per year (170 bushel per acre yield base) over fifty years with a 5% real discount rate. American journal of agricultural economics. Aug 1985. v. 67 (3). p. 550-562. Includes 14 references. (NAL Call No.: DNAL 280.8 J822).

1680

**Survival of Rhizoctonia solani and other soilborne basidiomycetes in fallow soil.**

PLDIDE. Bell, D.K. Sumner, D.R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1987. v. 71 (10). p. 911-915. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1681

**Tillage and mulch systems study in field corn.**

PNWSB. Enache, A. Ilnicki, R.D. Beltsville, Md. : The Society. Proceedings of the ... annual meeting - Northeastern Weed Science Society. 1987. v. 41. p. 13-17. Includes references. (NAL Call No.: DNAL 79.9 N814).

1682

**Tillage and soil insecticide effects on predator-black cutworm (Lepidoptera: Noctuidae) interactions in corn agroecosystems.**

JEENAI. Brust, G.E. Stinner, B.R.; McCartney, D.A. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1985. v. 78 (6). p. 1389-1392. Includes references. (NAL Call No.: DNAL 421 J822).

## (SOIL CULTIVATION)

1683

Tillage, nitrogen, herbicide, and nematicide effects on irrigated double-cropped corn and soybeans in the coastal plain /Myron B. Parker ... et al. . --.  
Parker, Myron B. Athens, Ga. : University of Georgia, College of Agriculture, Experiment Stations, 1985. "August 1985."~ Cover title.~ Map on p. 3 of cover. 35 p. : ill., 1 map ; 23 cm. Bibliography: p. 31-35. (NAL Call No.: DNAL S51.E2 no.326).

1684

### **Trouble-shooter's guide to no-till corn concerns.**

Waukesha, Wis. : No-Till Farmer, Inc. No-till farmer. Feb 1987. p. 8-9. ill. (NAL Call No.: DNAL S604.N6).

1685

### **Two years before the hatch: rootworms adapt to crop rotation.**

Krysan, J.L. Foster, D.E.; Branson, T.F.; Ostlie, K.R.; Cranshaw, W.S. College Park, Md. : The Society. Bulletin of the Entomological Society of America. Winter 1986. v. 32 (4). p. 250-253. Includes references. (NAL Call No.: DNAL 423.9 EN8).

1686

### **Weed control in corn.**

CRSDA. Bauman, T.T. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. Mar 1986. v. 38 (6). p. 15-16. ill. (NAL Call No.: DNAL 6 W55).

1687

### **Weed seed demise in soil in weed-free-corn (Zea mays) production across Nebraska.**

WEESA6. Burnside, D.C. Moomaw, R.S.; Roeth, F.W.; Wicks, G.A.; Wilson, R.G. Champaign, Ill. : Weed Science Society of America. Weed science. Mar 1986. v. 34 (2). p. 248-251. Includes 19 references. (NAL Call No.: DNAL 79.8 W41).

1688

### **Weed species distribution as influenced by tillage and herbicides.**

WEESA6. Wrucke, M.A. Arnold, W.E. Champaign, Ill. : Weed Science Society of America. Weed science. Nov 1985. v. 33 (6). p. 853-856. Includes 10 references. (NAL Call No.: DNAL 79.8 W41).

1689

### **Wheat residue management effects on soil water storage and corn production.**

SSSJD4. Unger, P.W. Madison, Wis. : The Society. Soil Science Society of America journal. May/June 1986. v. 50 (3). p. 764-770. Includes references. (NAL Call No.: DNAL 56.9 S03).

# SOIL EROSION AND RECLAMATION

1690

**Agriculture in the South: conservation's challenge.**  
JSWCA3. Healy, R.G. Sojka, R.E. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Mar/Apr 1985. v. 40 (2). p. 189-194. Includes 29 references. (NAL Call No.: DNAL 56.8 J822).

1691

**Built-in erosion control (Maize-soybean rotation, cropping systems, yields, Kentucky).**  
Wells, K.L. Washington, D.C. : The Administration. Extension review - United States Department of Agriculture, Science and Education Administration. Fall 1983. v. 54 (4). p. 30-31. ill. (NAL Call No.: 1 EX892EX).

1692

**Chemical and physical enrichments of sediment from cropland.**  
Young, R.A. Olness, A.E.; Mutchler, C.K.; Moldenhauer, W.C. St. Joseph, Mich. : American Society of Agricultural Engineers, c1985. Erosion and soil productivity : proceedings of the National Symposium on Erosion and Soil Productivity, December 10-11, 1984, Hyatt Regency New Orleans, New Orleans, Louisiana. p. 107-116. Includes 17 references. (NAL Call No.: DNAL S624.A1N46 1984).

1693

**Conservation tillage demonstration in southeastern Minnesota--1985.**  
MXMRA. Moncrief, J.F. Wagar, T.L.; Brietbach, D.D.; O'Leary, M.J.; Breitenbach, F.R.; Dstlie, K.R. St. Paul, Minn. : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. Includes statistical data. 1986. (2,rev). p. 276-285. (NAL Call No.: DNAL S1.M52).

1694

**Contributions of ground cover, dry matter, and nitrogen from intercrops and cover crops in a corn polyculture system.**  
AGJ0AT. Scott, T.W. Mt Pleasant, J.; Burt, R.F.; Otis, D.J. Madison, Wis. : American Society of Agronomy. Agronomy journal. Sept/Oct 1987. v. 79 (5). p. 792-798. Includes references. (NAL Call No.: DNAL 4 AM34P).

1695

**An economic analysis of terraces as an erosion control alternative on West Tennessee farms.**  
TUUAU. Blisard, W.N. Keller, L.H. Knoxville, Tenn. : The Station. Bulletin - Tennessee, Agricultural Experiment Station. Nov 1983. (628). 44 p. Includes references. (NAL Call No.: DNAL 100 T25S (1)).

1696

**The effect of row cultivation on runoff, soil loss and corn grain yield.**  
McIsaac, G.F. Mitchell, J.K.; Siemens, J.C.; Hummel, J.W. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-2036). 14 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1697

**Farming without chemicals (Rotation of oats/legumes and grasses-hay-maise-soybeans-maize, organic farming, Iowa).**  
Thompson, D. Thompson, S. Washington : Office of Public Awareness. EPA Environmental Protection Agency journal. June 1984. v. 10 (5). p. 33-34. ill. (NAL Call No.: TD171.U5).

1698

**Fate of nitrogen mineralized from nitrogen-15-labeled alfalfa in no-till, intercropped corn.**  
Jordan, D. Harris, D.; Rice, C.W.; Tiedje, J.M. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 60. Includes references. (NAL Call No.: DNAL SB203.R6).

1699

**Legume cover cropping, no-till practices, and soil arthropods: ecological interactions and agronomic significance.**  
House, G.J. Crossley, D.A. Jr. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April

## (SOIL EROSION AND RECLAMATION)

27-29, 1987, University of Georgia, Athens, Georgia. p. 68-69. Includes references. (NAL Call No.: DNAL SB203.R6).

### 1700

#### **Legume cover crops for no-till corn.**

Koch, P.L. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 119-120. (NAL Call No.: DNAL SB203.R6).

### 1701

#### **Legume nitrogen transformation and recovery by corn as influenced by tillage.**

Varco, J.J. Frye, W.W.; Smith, M.S.; Grove, J.H. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 40. Includes references. (NAL Call No.: DNAL SB203.R6).

### 1702

#### **Maize yields and soil loss with conservation and conventional tillage practices on a tropical Aridisol.**

Fahrney, K.S. El-Swaify, S.A.; Lo, A.K.F.; Joy, R.J. Ankeny, Iowa : Soil Conservation Society of America, c1987. The role of legumes in conservation tillage systems / J.F. Power, editor. Paper presented at the "National Conference on the Role of Legumes in Conservation Tillage Systems", April 27-29, 1987, University of Georgia, Athens, Georgia. p. 138-140. Includes references. (NAL Call No.: DNAL SB203.R6).

### 1703

#### **Managing corn residue to control soil and nutrient losses (Runoff, simulated rainfall plots, conservation tillage).**

Mickelson, S.K. Baker, J.L.; Laflen, J.M. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-2161). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

### 1704

#### **Managing erosion potential through controlled corn residue harvest (Zea mays).**

Colvin, T.S. Claar, P.W. II; Marley, S.J. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1981. Paper presented at the 1981 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1981. (fiche no. 81-1024). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

### 1705

#### **Minespoil acidity and rowcrop productivity.**

JEVQAA. Dancer, W.S. Jansen, I.J. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. July/Sept 1987. v. 16 (3). p. 242-246. Includes references. (NAL Call No.: DNAL QH540.U6).

### 1706

#### **Seed corn growers concerned about wind erosion.**

Herceg, A.G. Washington, D.C. : The Service. Soil & water conservation news - United States Dept. of Agriculture, Soil Conservation Service. Oct 1986. v. 7 (7). p. 8. ill. (NAL Call No.: DNAL aS622.S6).

### 1707

#### **Short- and long-term cost comparisons of conventional and conservation tillage systems in corn production.**

JSWCA3. Mueller, D.H. Klemme, R.M.; Daniel, T.C. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Sept/Oct 1985. v. 40 (5). p. 466-470. Includes 29 references. (NAL Call No.: DNAL 56.8 J822).

### 1708

#### **Soil erosion from tillage systems used in soybean and corn residues.**

TAAEA. Dickey, E.C. Shelton, D.P.; Jasa, P.J.; Peterson, T.R. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. July/Aug 1985. v. 28 (4). p. 1124-1129, 1140. Includes references. (NAL Call No.: DNAL 290.9 AM32T).

1709

Soil water depletion under crops on reclaimed  
and undisturbed soils.

JEVQAA. Schroeder, S.A. Halvorson, G.A.  
Madison, Wis. : American Society of Agronomy.  
Journal of environmental quality. Jan/Mar 1988.  
v. 17 (1). p. 130-134. Includes references.  
(NAL Call No.: DNAL QH540.J6).

# FOREST PRODUCTS - WOOD

1710

**Effects of pH on lignin and cellulose degradation by *Streptomyces viridosporus*.**  
APMBA. Pometto, A.L. III. Crawford, D.L.  
Washington, D.C. : American Society for  
Microbiology. Applied and environmental  
microbiology. Aug 1986. v. 52 (2). p. 246-250.  
Includes 21 references. (NAL Call No.: DNAL  
448.3 AP5).

# ENTOMOLOGY RELATED

1711

**Adjusting corn belt farming to meet corn-borer conditions /by Kenneth H. Myers.**  
Myers, Kenneth Hayes, 1898-. Washington, D.C. : U.S. Dept. of Agriculture, 1932. ii, 26 p. : ill., maps ; 23 cm. Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84F no.1681).

1712

**Aerial dispersal of spiders (Araneae) in a Florida cornfield ecosystem.**  
EVETEX. Plagens, M.J. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1225-1233. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

1713

**Benomyl inhibition of Cotesia (= Apanteles) marginiventris survival in four lepidopterous hosts.**  
GENSAB. Teague, T.G. Horton, D.L.; Yearian, W.C.; Phillips, J.R. Athens, Ga. : The Society. Journal of Entomological Science. Jan 1985. v. 20 (1). p. 76-81. Includes references. (NAL Call No.: DNAL QL461.G4).

1714

**The bollworm or corn earworm /F.C. Bishopp.**  
Bishopp, F. C. 1884-. Washington, D.C. : U.S. Dept. of Agriculture, 1917. Cover title.~ "Contribution from the Bureau of Entomology." 16 p. : ill., 1 map ; 23 cm. Bibliography: p. 16. (NAL Call No.: DNAL 1 Ag84F no.872).

1715

**The bollworm or corn earworm /F.C. Bishopp.**  
Bishopp, F. C. 1884-. Washington, D.C. : U.S. Dept. of Agriculture, 1922. "Contribution from the Bureau of Entomology."~ Originally issued Oct. 1917. 16 p. : ill., 1 map ; 23 cm. Bibliography: p. 16. (NAL Call No.: DNAL 1 Ag84F no.872 1922).

1716

**Chromatin organization and the control of gene activity.**  
IRCYA. Nagl, W. Orlando, Fla. : Academic Press. International review of cytology. Literature review. 1985. v. 94. p. 21-56. ill. Includes references. (NAL Call No.: DNAL 442.8 IN82).

1717

**The corn earworm its ravages on field corn and suggestions for control /W.J. Phillips and Kenneth M. King.**  
Phillips, W. J. 1879-. King, Kenneth M. 1896-. Washington, D.C. : U.S. Dept. of Agriculture, 1923. Cover title. 18 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1310).

1718

**The corn earworm as an enemy of field corn in the eastern states /by R.A. Blanchard and W.A. Douglas.**  
Blanchard, R. A. 1900-. Douglas, W. A. 1906-. Washington, D.C. : U.S. Dept. of Agriculture, 1953. 15 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1651 1953).

1719

**The corn earworm as an enemy of field corn in the eastern states by R.A. Blanchard and W.A. Douglas . --.**  
Blanchard, R. A. Washington, D.C. : U.S. Dept. of Agriculture, 1953. 15 p. : ill. --. (NAL Call No.: DNAL Fiche S-70 no.1651 1953).

1720

**The corn earwormits ravages on field corn and suggestions for control / W.J. Phillips and Kenneth M. King . --.**  
Phillips, W. J. Washington, D.C. : U.S. Dept. of Agriculture, 1923. 18 p. : ill. --. (NAL Call No.: DNAL Fiche S-70 no.1310).

1721

**The corn root-worms: Diabrotica 12-punctata and Diabrotica longicornis.**  
KAEBE. Garman, H. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. June 1907. (130,pt.2). p. 42-46. (NAL Call No.: DNAL 100 K41 (2)).

1722

**Degree of aflatoxin B1 sensitivity in Virginia natural population of Drosophila melanogaster (Aflatoxin contamination of corn, peanuts).**  
Delawder, S. Chinnici, J.P. Richmond, Va. : Virginia Academy of Science. Virginia journal of science. Summer 1983. v. 34 (2). p. 48-57. Includes references. (NAL Call No.: 470 V81).

## (ENTOMOLOGY RELATED)

1723

**Determination of instar of the European corn borer (Lepidoptera: Pyralidae) based on a distribution model of head capsule widths.**  
AESAAI. Got, B. College Park, Md. : The Society. Annals of the Entomological Society of America. Jan 1988. v. 81 (1). p. 91-98. Includes references. (NAL Call No.: DNAL 420 EN82).

1724

**Development and reproduction of the predator Orius insidiosus (Hemiptera: Anthocoridae) reared on diets of selected plant material and arthropod prey.**  
AESAAI. Kiman, Z.B. Yeangan, K.V. College Park, Md. : The Society. Annals of the Entomological Society of America. July 1985. v. 78 (4). p. 464-467. Includes references. (NAL Call No.: DNAL 420 EN82).

1725

**Development and survival of pupae of Diabrotica virgifera virgifera and Diabrotica undecimpunctata howardi (Coleoptera: Chrysomelidae) at constant temperatures and humidities.**  
EVETEX. Fisher, J.R. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 626-630. Includes references. (NAL Call No.: DNAL QL461.E532).

1726

**Electroantennogram responses of corn rootworms and other closely related Diabrotica (Coleoptera: Chrysomelidae) to sex pheromones and synthetic attractants.**  
JKESA. Wilkin, P.J. Krysan, J.L.; Guss, P.L. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Oct 1986. v. 59 (4). p. 571-579. ill. Includes references. (NAL Call No.: DNAL 420 K13).

1727

**The European corn borer /D.J. Caffrey.**  
Caffrey, D. J. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 23 cm. Cover title.~ "Contribution from the Bureau of Entomology." 28 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1046).

1728

**The European corn borer how to control it /prepared by Entomology Research Division, Agricultural Research Service.**  
Washington, D.C. : U.S. Dept. of Agriculture, 1968. Originally issued in 1962; rev. June 1967. 20 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.2190 1968).

1729

**The European corn borer its present status and methods of control /by D.J. Caffrey.**  
Caffrey, D. J. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 1935. Originally issued Oct. 1927.~ "The original edition of this bulletin was written by D.J. Caffrey and L.H. Worthley." 39 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1548 1935).

1730

**The European corn borer its present status and methods of control /by D.J. Caffrey and L.H. Worthley.**  
Caffrey, D. J. 1886-. Worthley, L. H. 1877-. Washington, D.C. : U.S. Dept. of Agriculture, 1927. "This bulletin supersedes Farmers' bulletin 1294." 48 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1548).

1731

**The European corn borer and its control /D.J. Caffrey and L.G. Worthley.**  
Caffrey, D. J. 1886-. Worthley, L. H. 1877-. Washington, D.C. : U.S. Dept. of Agriculture, 1922. Cover title. 45 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1294).

1732

**The European corn borer and its control /prepared by Entomology Research Branch, Agricultural Research Service.**  
Washington, D.C. : U.S. Dept. of Agriculture, 1955. "Supersedes Farmers' bulletin 1548: The European corn borer: its present status and methods of control." 20 p. : ill., map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.2084).

1733

**The European corn borera menace to the country's corn crop /D.J. Caffrey. --.**  
Caffrey, D. J. Washington, D.C. : U.S. Dept. of Agriculture, 1919. 32 p. : ill., map --. Bibliography: p. 29-30. (NAL Call No.: DNAL Fiche S-70 no.1046).

1734

The European corn borer how to control it / prepared by Entomology Research Division, Agricultural Research Service . --. Washington, D.C. : U.S. Dept. of Agriculture, 1968. 14 p. : ill. --. (NAL Call No.: DNAL Fiche S-70 no.2190 1968).

1735

The European corn borer its present status and methods of control / by W.A. Baker and W.G. Bradley . --.

Baker, W. A. Washington, D.C. : U.S. Dept. of Agriculture, 1948. ii, 46 p. : ill., map --. (NAL Call No.: DNAL Fiche S-70 no.1548 1948).

1736

Fall armyworm (Lepidoptera: Noctuidae): field survival of F1 larvae from partially sterile parents.

FETMA. Carpenter, J.E. Young, J.R.; Sparks, A.N. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. June 1985. v. 68 (2). p. 290-296. Includes references. (NAL Call No.: DNAL 420 F662).

1737

Farm practices under corn-borer conditions / by Jesse W. Tapp, George W. Collier and C.R. Arnold.

Tapp, Jesse W. 1898-. Collier, George W. 1897-. Arnold, C. R. 1891-. Washington, D.C. : U.S. Dept. of Agriculture, 1928. 21 p. : ill., 4 maps ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1562).

1738

First instar western corn rootworm (Coleoptera: Chrysomelidae) response to carbon dioxide.

EVETEX. Strnad, S.P. Bergman, M.K.; Fulton, W.C. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1986. v. 15 (4). p. 839-842. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

1739

Fruity aromas from pink mold and their association with insect attraction.

JAUPA. Hepperly, P.R. Rodriguez-Cancel, R.E. Mayaguez : University of Puerto Rico, Agricultural Experiment Station. The Journal of agriculture of the University of Puerto Rico. July 1987. v. 71 (3). p. 327-330. Includes references. (NAL Call No.: DNAL 8 P832J).

1740

Genetic differentiation and its bearing on migration in North American populations of the corn leaf aphid, *Rhopalosiphum maidis* (Fitch) (Homoptera: Aphididae).

AESAAI. Steiner, W.W.M. Voegtlin, D.J.; Irwin, M.E. College Park, Md. : The Society. Annals of the Entomological Society of America. July 1985. v. 78 (4). p. 518-525. ill., maps. Includes references. (NAL Call No.: DNAL 420 EN82).

1741

Horizontal transmission of *Nosema pyrausta* (Microsporidia: Nosematidae) in the European corn borer, *Ostrinia nubilalis* (Lepidoptera: Pyralidae).

EVETEX. Andreadis, T.G. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1987. v. 16 (5). p. 1124-1129. Includes references. (NAL Call No.: DNAL QL461.E532).

1742

Husker-shredders in corn-borer control / by I.F. Reed and W.R. Humphries.

Reed, I. F. 1903-. Humphries, W. R. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. 17 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1662).

1743

Insecticide tolerance of ground- and foliage-dwelling spiders (Araneae) in European corn borer (Lepidoptera: Pyralidae) action sites.

EVETEX. Whitford, F. Showers, W.B.; Edwards, G.B. College Park, Md. : Entomological Society of America. Environmental entomology. June 1987. v. 16 (3). p. 779-785. Includes references. (NAL Call No.: DNAL QL461.E532).

1744

Key and diagnosis of the instars of the corn leaf aphid *Rhopalosiphum maidis* (Fitch).

SENTD. Kring, T.J. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Dec 1985. v. 10 (4). p. 289-293. ill. Includes references. (NAL Call No.: DNAL QL461.S65).

1745

The larger corn stalk-borer / by George G. Ainslie.

Ainslie, George G. 1886-1930. Washington, D.C. : U.S. Dept. of Agriculture, 1914. Caption title. ~ "Contribution from the Bureau of Entomology." 8 p. : ill. ; 23 cm. (NAL Call

## (ENTOMOLOGY RELATED)

No.: DNAL 1 Ag84F no.634).

1746

**The larger corn stalk-borer /George G. Ainslie.**  
Ainslie, George G. 1886-1930. Phillips, W. J. 1879-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. "This revision was made by W.U. Phillips.". 6 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1025 1933).

1747

**The larger corn stalk-borer /George G. Ainslie.**  
Ainslie, George G. 1886-1930. Washington, D.C. : U.S. Dept. of Agriculture, 1919. Cover title.~ "This publication supersedes Farmers' bulletin 634.". 12 p. : ill., 1 map ; 23 cm. Bibliography: p. 12. (NAL Call No.: DNAL 1 Ag84F no.1025).

1748

**Major plasma proteins of larvae of the Southwestern corn borer, *Diatraea grandiosella*.**  
Lenz, C.J. Venkatesh, K.; Chippendale, G.M. New York, N.Y. : Alan R. Liss, Inc. Archives of insect biochemistry and physiology. Aug 1987. v. 5 (4). p. 271-284. ill. Includes references. (NAL Call No.: DNAL QL495.A7).

1749

***Orius insidiosus* (Say), an important natural enemy of the corn ear worm /by G.W. Barber.**  
Barber, George W. 1890-1948. Washington : U.S. Dept. of Agriculture, 1936. Caption title. 24 p. : ill. ; 23 cm. Literature cited: p. 22-24. (NAL Call No.: DNAL 1 Ag84Te no.504).

1750

**Predator activity and predation in corn agroecosystems.**

EVETEX. Brust, G.E. Stinner, B.R.; McCartney, D.A. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1986. v. 15 (5). p. 1017-1021. Includes references. (NAL Call No.: DNAL QL461.E532).

1751

**Prediction of Stewart's wilt disease in single and three-way crosses in maize.**  
PLDRA. Forgey, W.M. Blanco, M.H.; Darrah, L.L.; Zuber, M.S. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1982. v. 66 (12). p. 1159-1162. Includes references. (NAL Call No.: DNAL 1.9 P69P).

1752

**Reproductive biology and survival of *Diabrotica barberi* (Coleoptera: Chrysomelidae): effect of temperature, food, and seasonal time of emergence.**

AESAA1. Naranjo, S.E. Sawyer, A.U. College Park, Md. : The Society. Annals of the Entomological Society of America. Nov 1987. v. 80 (6). p. 841-848. Includes references. (NAL Call No.: DNAL 420 EN82).

1753

**Reproductive incompatibility between host strains of the fall armyworm (Lepidoptera: Noctuidae).**

AESAA1. Pashley, D.P. Martin, J.A. College Park, Md. : The Society. Annals of the Entomological Society of America. Nov 1987. v. 80 (6). p. 731-733. Includes references. (NAL Call No.: DNAL 420 EN82).

1754

**The rough-headed corn stalk-beetle in the southern states and its control /W.J. Phillips and Henry Fox.**

Phillips, W. J. 1879-. Fox, Henry, 1875-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. Originally issued Oct. 1917. 6 p. : ill., 1 map ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.875 1933).

1755

**The rough-headed corn stalk-beetle in the southern states and its control /W.J. Phillips and Henry Fox.**

Phillips, W. J. 1879-. Fox, Henry, 1875-. Washington, D.C. : U.S. Dept. of Agriculture, 1917. Cover title.~ "Contribution from the Bureau of Entomology.". 12 p. : ill., 1 map ; 23 cm. Bibliography: p. 10-12. (NAL Call No.: DNAL 1 Ag84F no.875).

1756

**The southern corn rootworm and farm practices to control it /Philip Luginbill.**

Luginbill, Philip, 1884-. Washington, D.C. : U.S. Dept. of Agriculture, 1918. Cover title.~ "Contribution from the Bureau of Entomology.". 12 p. : ill., 1 map ; 23 cm. List of publications "relating to insects injurious to cereal and forage crops" p. 11-12. (NAL Call No.: DNAL 1 Ag84F no.950).

1757

**Strains of the European corn borer in the United States /by K.D. Arbuthnot.**

Arbuthnot, K. D. 1902-. Washington : U.S. Dept. of Agriculture, 1944. Caption title. 20 p. : ill. ; 23 cm. Literature cited: p. 19-20. (NAL Call No.: DNAL 1 Ag84Te no.869).

1758

**Study of migratory flight in the western corn rootworm (Coleoptera: Chrysomelidae).**

EVETEX. Coats, S.A. Tollefson, J.J.; Mutchmor, J.A. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 620-625. Includes references. (NAL Call No.: DNAL QL461.E532).

# ANIMAL GENETICS

1759

**Chromatin organization and the control of gene activity.**  
IRCYA. Nagl, W. Orlando, Fla. : Academic Press. International review of cytology. Literature review. 1985. v. 94. p. 21-56. ill. Includes references. (NAL Call No.: DNAL 442.8 IN82).

1760

**Fall armyworm (Lepidoptera: Noctuidae): field survival of F1 larvae from partially sterile parents.**  
FETMA. Carpenter, J.E. Young, J.R.; Sparks, A.N. Gainesville, Fla. : Florida Entomological Society. Florida entomologist. June 1985. v. 68 (2). p. 290-296. Includes references. (NAL Call No.: DNAL 420 F662).

1761

**Genetic differentiation and its bearing on migration in North American populations of the corn leaf aphid, *Rhopalosiphum maidis* (Fitch) (Homoptera: Aphididae).**  
AESAAI. Steiner, W.W.M. Voegtlin, D.J.; Irwin, M.E. College Park, Md. : The Society. Annals of the Entomological Society of America. July 1985. v. 78 (4). p. 518-525. ill., maps. Includes references. (NAL Call No.: DNAL 420 EN82).

1762

**Sex pheromone production and perception in European corn borer moths is determined by both autosomal and sex-linked genes.**  
PNASA. Roelofs, W. Glover, T.; Tang, X.H.; Sreng, I.; Robbins, P.; Eckenrode, C.; Lofstedt, C.; Hansson, B.S.; Bengtsson, B.O. Washington, D.C. : The Academy. Proceedings of the National Academy of Sciences of the United States of America. Nov 1987. v. 84 (21). p. 7585-7589. Includes references. (NAL Call No.: DNAL 500 N21P).

# ANIMAL REPRODUCTION

1763

**Reproductive biology and survival of *Diabrotica barberi* (Coleoptera: Chrysomelidae): effect of temperature, food, and seasonal time of emergence.**

AESAAI. Naranjo, S.E. Sawyer, A.J. College Park, Md. : The Society. Annals of the Entomological Society of America. Nov 1987. v. 80 (6). p. 841-848. Includes references. (NAL Call No.: DNAL 420 EN82).

1764

**Reproductive incompatibility between host strains of the fall armyworm (Lepidoptera: Noctuidae).**

AESAAI. Pashley, D.P. Martin, J.A. College Park, Md. : The Society. Annals of the Entomological Society of America. Nov 1987. v. 80 (6). p. 731-733. Includes references. (NAL Call No.: DNAL 420 EN82).

# ANIMAL ECOLOGY

1765

**Aerial dispersal of spiders (Araneae) in a Florida cornfield ecosystem.**

EVETEX. Plagens, M.J. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1986. v. 15 (6). p. 1225-1233. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

1766

**The corn root-worms: *Diabrotica 12-punctata* and *Diabrotica longicornis*.**

KAEBBA. Garman, H. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. June 1907. (130,pt.2). p. 42-46. (NAL Call No.: DNAL 100 K41 (2)).

1767

**Study of migratory flight in the western corn rootworm (Coleoptera: Chrysomelidae).**

EVETEX. Coats, S.A. Tollefson, J.J.; Mutchmor, J.A. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 620-625. Includes references. (NAL Call No.: DNAL QL461.E532).

# ANIMAL STRUCTURE

1768

Determination of instar of the European corn borer (Lepidoptera: Pyralidae) based on a distribution model of head capsule widths.

AESAAI. Got, B. College Park, Md. : The Society. Annals of the Entomological Society of America. Jan 1988. v. 81 (1). p. 91-98.

Includes references. (NAL Call No.: DNAL 420 EN82).

# ANIMAL PHYSIOLOGY AND BIOCHEMISTRY

1769

**Biology of the seed-corn maggot in the coastal plain of the south Atlantic states /by W.J. Reid, Jr.**

Reid, W. J. 1902-. Washington : U.S. Dept. of Agriculture, 1940. Caption title. 44 p. : ill. ; 23 cm. Literature cited: p. 41-43. (NAL Call No.: DNAL 1 Ag84Te no.723).

1770

**Development and survival of pupae of *Diabrotica virgifera virgifera* and *Diabrotica undecimpunctata howardi* (Coleoptera: Chrysomelidae) at constant temperatures and humidities.**

EVETEX. Fisher, J.R. College Park, Md. : Entomological Society of America. Environmental entomology. June 1986. v. 15 (3). p. 626-630. Includes references. (NAL Call No.: DNAL QL461.E532).

1771

**Electroantennogram responses of corn rootworms and other closely related *Diabrotica* (Coleoptera: Chrysomelidae) to sex pheromones and synthetic attractants.**

JKESA. Wilkin, P.J. Krysan, J.L.; Guss, P.L. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Oct 1986. v. 59 (4). p. 571-579. ill. Includes references. (NAL Call No.: DNAL 420 K13).

1772

**First instar western corn rootworm (Coleoptera: Chrysomelidae) response to carbon dioxide.**

EVETEX. Strnad, S.P. Bergman, M.K.; Fulton, W.C. College Park, Md. : Entomological Society of America. Environmental entomology. Aug 1986. v. 15 (4). p. 839-842. ill. Includes references. (NAL Call No.: DNAL QL461.E532).

1773

**Major plasma proteins of larvae of the Southwestern corn borer, *Diatraea grandiosella*.**

Lenz, C.J. Venkatesh, K.; Chippendale, G.M. New York, N.Y. : Alan R. Liss, Inc. Archives of insect biochemistry and physiology. Aug 1987. v. 5 (4). p. 271-284. ill. Includes references. (NAL Call No.: DNAL QL495.A7).

1774

**Metabolism of isofenphos in southern corn rootworm.**

PCBPB. Hsin, C.Y. Coats, J.R. New York, N.Y. : Academic Press. Pesticide biochemistry and physiology. June 1986. v. 25 (3). p. 336-345. Includes 23 references. (NAL Call No.: DNAL SB951.P49).

# ANIMAL TAXONOMY AND GEOGRAPHY

1775

Key and diagnosis of the instars of the corn  
leaf aphid *Rhopalosiphum maidis* (Fitch).  
SENTD. Kring, T.J. College Station, Tex. :  
Southwestern Entomological Society. The  
Southwestern entomologist. Dec 1985. v. 10 (4).  
p. 289-293. ill. Includes references. (NAL Call  
No.: DNAL QL461.S65).

# VETERINARY PHARMACOLOGY, TOXICOLOGY AND IMMUNE THERAPEUTIC AGENTS

1776

**Detoxification of deoxynivalenol with sodium bisulfite and evaluation of the effects when pure mycotoxin or contaminated corn was treated and given to pigs.**

JAFCAU. Young, J.C. Trenholm, H.L.; Friend, D.W.; Prelusky, D.B. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Mar/Apr 1987. v. 35 (2). p. 259-261. Includes references. (NAL Call No.: DNAL 381 J8223).

# PEST OF ANIMALS - INSECTS

1777

**Apanteles diatraeae**, a braconid parasite of the southwestern corn borer /by E.G. Davis.  
Davis, E. G. 1901-. Washington : U.S. Dept. of Agriculture, 1944. Caption title. 19 p. : ill. ; 23 cm. Literature cited: p. 19. (NAL Call No.: DNAL 1 Ag84Te no.871).

1778

**The biology and morphology of the braconid Chelonus annulipes Wesm.**, a parasite of the European corn borer /by Arlo M. Vance.  
Vance, Arlo McGrillis, 1899-. Washington : U.S. Dept. of Agriculture, 1932. Cover title. 48 p., 1 leaf of plates : ill., 1 map ; 23 cm. Literature cited: p. 48. (NAL Call No.: DNAL 1 Ag84Te no.294).

1779

**The biology of Cremastus flavoorbitalis (Cameron)**, an ichneumonid parasite of the European corn borer /by W.G. Bradley and E.D. Burgess.  
Bradley, W. G. 1892-. Burgess, Emory D. 1907-. Washington : U.S. Dept. of Agriculture, 1934. Caption title. 16 p., 2 p. of plates : ill. ; 23 cm. Literature cited: p. 15. (NAL Call No.: DNAL 1 Ag84Te no.441).

1780

**Development and reproduction of the predator Orius insidiosus (Hemiptera: Anthocoridae) reared on diets of selected plant material and arthropod prey.**  
AESAAI. Kiman, Z.B. Yeargan, K.V. College Park, Md. : The Society. Annals of the Entomological Society of America. July 1985. v. 78 (4). p. 464-467. Includes references. (NAL Call No.: DNAL 420 EN82).

1781

**Macrocentrus gifuensis Ashmead a polyembryonic braconid parasite in the European corn borer /by H.L. Parker.**  
Parker, Harry L. Washington : U.S. Dept. of Agriculture, 1931. Caption title. 63 p., 1 leaf of plates : ill. ; 23 cm. Literature cited: p. 61-62. (NAL Call No.: DNAL 1 Ag84Te no.230).

1782

**Orius insidiosus (Say)**, an important natural enemy of the corn ear worm /by G.W. Barber.  
Barber, George W. 1890-1948. Washington : U.S. Dept. of Agriculture, 1936. Caption title. 24 p. : ill. ; 23 cm. Literature cited: p. 22-24. (NAL Call No.: DNAL 1 Ag84Te no.504).

1783

**Phaeogenes nigridens Wesmael**, an important ichneumonid parasite of the pupa of the European corn borer /by H.D. Smith.  
Smith, H. D. 1894-. Washington : U.S. Dept. of Agriculture, 1932. Caption title.~ Errata Inserted. 46 p. : ill. ; 23 cm. Literature cited: p. 44-45. (NAL Call No.: DNAL 1 Ag84Te no.331).

1784

**Studies of Exeristes roborator (Fab.)**, a parasite of the European corn borer in the Lake Erie area /by W.A. Baker and L.G. Jones.  
Baker, W. A. 1898-. Jones, L. G. Washington : U.S. Dept. of Agriculture, 1934. Caption title. 27 p., 2 p. of plates : ill. ; 23 cm. Literature cited: p. 25-26. (NAL Call No.: DNAL 1 Ag84Te no.460).

1785

**Theory and tactics of Heliothis population management I-Cultural and biological control /edited by S.J. Johnson, E.G. King and J.R. Bradley, Jr. --.**  
Johnson, S. J.; King, E. G.; Bradley, J. R. Stillwater, Okla. : Agricultural Experiment Station, Division of Agriculture, Oklahoma State University, 1986. "February 1986."~ "Proceedings of a workshop held at Tifton, GA, March 15, 1983." : t.p.~ "Southern Regional Project S-59: Ecology and management of Heliothis population on cotton, corn, soybeans and other host plants . . . Workshop I: Cultural and biological control." : p. iv-1. iv, 161 p. ; 28 cm. --. Includes bibliographies. (NAL Call No.: DNAL 100 G29So no.316).

1786

**Tridiphane 2-(3,5-dichlorophenyl)-2-(2,2,2-trichloroethyl)oxirane an atrazine synergist: enzymatic conversion to a potent glutathione S-transferase inhibitor.**  
PCBPB. Lamoureux, G.L. Rusness, D.G. Duluth, Minn. : Academic Press. Pesticide biochemistry and physiology. Dec 1986. v. 26 (3). p. 323-342. Includes 40 references. (NAL Call No.: DNAL SB951.P49).

1787

**Variation in number of instars, longevity, and fecundity of Cyrtorhinus lividipennis Reuter (Hemiptera: Miridae).**  
AESAAI. Liquido, N.J. Nishida, T. College Park, Md. : The Society. Annals of the Entomological Society of America. July 1985. v. 78 (4). p. 459-463. Includes references. (NAL Call No.: DNAL 420 EN82).

# PEST OF ANIMALS - PROTOZOA

1788

Horizontal transmission of *Nosema pyrausta* (Microsporida: Nosematidae) in the European corn borer, *Ostrinia nubilalis* (Lepidoptera: Pyralidae).

EVETEX, Andreadis, T.G. College Park, Md. : Entomological Society of America. Environmental entomology. Oct 1987. v. 16 (5). p. 1124-1129. Includes references. (NAL Call No.: DNAL QL461.E532).

# ANIMAL DISEASES - GENERAL

1789

Begin to fight the corn borer now /by W.P.  
Flint, J.C. Hackleman, and F.C. Bauer.  
Flint, W. P. 1882-. Bauer, F. C. 1886-;  
Hackleman, J. C. 1888-. Urbana, Ill. :  
University of Illinois Agricultural Experiment  
Station, 1923. Cover title. 8 p. : ill., 1 map  
; 23 cm. (NAL Call No.: DNAL 275.29 IL62C  
no.274).

# ANIMAL DISEASES - FUNGAL

1790

**Degree of aflatoxin B1 sensitivity in Virginia natural population of *Drosophila melanogaster* (Aflatoxin contamination of corn, peanuts).**

Delawder, S. Chinnici, J.P. Richmond, Va. : Virginia Academy of Science. Virginia journal of science. Summer 1983. v. 34 (2). p. 48-57. Includes references. (NAL Call No.: 470 V81).

# ANIMAL DISORDERS - PHYSICAL TRAUMA

1791

**Moniliformin production in Fusarium section**

**Liseola.**

MYCOAE. Marasas, W.F.O. Thiel, P.G.; Rabie, C.J.; Nelson, P.E.; Toussoun, T.A. Bronx, N.Y. : The New York Botanical Garden. Mycologia. Mar/Apr 1986. v. 78 (2). p. 242-247. Includes 29 references. (NAL Call No.: DNAL 450 M99).

# NONFOOD

1792

**Corncob granules and pelleted carriers: New, controlled, safer methods of handling pesticides.**

Vander Hooven, D.I.B. Philadelphia : American Society for Testing and Materials, c1983. Pesticide formulations and application systems, third symposium : a symposium / sponsored by ASTM Committee E-35 on Pesticides, Fort Mitchell, Ky., 12 Oct 1982 ; T.M. Kaneko, N.B. Akesson, editors. p. 132-140. ill. Includes 45 references. (NAL Call No.: DNAL SB950.93.P47 1983).

1793

**A study of explosive autohydrolysis of corncobs at 240 degrees C.**

Filatova, A.M. Khomenko, N.D.; Glazman, B.A.; Papazov, Yu.G.; Gorelov, A.V.; Evlanova, A.G. New York, N.Y. : Allerton Press. Hydrolysis and wood chemistry USSR. Translated from: *Gidroliznaia i lesokhimicheskaia promyshlennost'*, (6), 1987, p. 3-6. (301.8 G36). 1987. (6). p. 6-12. ill. Includes references. (NAL Call No.: DNAL TS920.H8).

# AGRICULTURAL ENGINEERING

1794

**Dust suppression characteristics of corn, wheat and soybeans treated with mineral oil additives.**

Jones, D.D. Parnell, C.B. Jr. St. Joseph, Mich.  
: The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-3558). 35 p. ill. Includes references. (NAL Call No.: DNAL FICHE S-72).

# FARM EQUIPMENT

1795

**Effects of controlled traffic in corn plots.**  
Sial, J.K. Marley S.J.; Erbach, D.C. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-1049). 24 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1796

**Husker-shredders in corn-borer control /by I.F. Reed and W.R. Humphries.**  
Reed, I. F. 1903-. Humphries, W. R. 1886-. Washington, D.C. : U.S. Dept. of Agriculture, 1931. 17 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84F no.1662).

1797

**Incorporation of granular soil insecticides by corn planters.**  
Hummel, J.W. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-1017). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1798

**Listing leaves herbicides behind.**  
Cramer, C. Emmaus, Pa. : Regenerative Agriculture Association. The New farm. May/June 1987. v. 9 (4). p. 38-40. ill. (NAL Call No.: DNAL S1.N32).

1799

**Shelled damage using drag-type conveyors.**  
Converse, H.H. Johnson, R.S.; Chung, D.S.; Chang, C.S. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, Summer 1985. (fiche no. 85-3007). 30 p. ill. Includes references. (NAL Call No.: DNAL FICHE 290.9 AM32P).

1800

**Use of farm machinery for corn-borer control in the one-generation area /by R.M. Merrill.**  
Merrill, R. M. 1895-. Washington, D.C. : U.S. Dept. of Agriculture, 1934. Caption title.~ "Contribution from Bureau of Agricultural Engineering.". 11 p. : ill. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.321).

# NATURAL RESOURCES

1801

**Effects on wildlife of at-planting corn  
applications of granular carbofuran.**

JWMAA9. Balcomb, R. Bowen, C.A.; Wright, D.;  
Law, M. Bethesda, Md. : Wildlife Society.  
Journal of wildlife management. Oct 1984. v. 48  
(4). p. 1353-1359. Includes references. (NAL  
Call No.: DNAL 410 J827).

# CONSERVATION AND USE OF ENERGY

1802

**Improving low temperature drying using mold resistant hybrids.**

Friday, D.C. Stroshine, R.L.; Tuite, J. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-3010). 19 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

# BIOMASS ENERGY SOURCES

1803

**Contaminant residues on corn dried by  
combustion gases from biomass furnaces.**

Jacko, R.B. Foster, G.H.; Barrett, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3523). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

# DRAINAGE AND IRRIGATION

1804

**Control of first-generation European corn borer (Lepidoptera: Pyralidae) larvae in Nebraska by applying insecticides by center-pivot irrigation systems.**

JEENAI. Witkowski, J.F. Barber, D.T.; Currier, D.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Dec 1986. v. 79 (6). p. 1595-1598. Includes references. (NAL Call No.: DNAL 421 J822).

1805

**Crop stress from wetness in undrained areas.**

Kanwar, R.S. Baker, J.L.; Melvin, S.W.; Mukhtar, S. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-2558). 27 p. maps. Includes references. (NAL Call No.: DNAL FICHE S-72).

1806

**Determination of crop production loss due to inadequate drainage in a large watershed (Maize, soybeans, Iowa, Des Moines River basin).**

Kanwar, R.S. Johnson, H.P.; Fenton, T.E. Minneapolis, Minn. : American Water Resources Association. Water resources bulletin. Aug 1984. v. 20 (4). p. 589-597. maps. Includes 9 references. (NAL Call No.: 292.9 AM34).

1807

**Effects of irrigation and kernel injury on aflatoxin B1 production in selected maize hybrids.**

PLDRA. Fortnum, B.A. Manwiller, A. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1985. v. 69 (3). p. 262-265. ill. Includes 22 references. (NAL Call No.: DNAL 1.9 P69P).

1808

**An evaluation of chemigation for southwestern corn borer control.**

Michels, G.U. Behle, R.W. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. Apr 1986. (4361). 5 p. (NAL Call No.: DNAL 100 T31P).

1809

**Irrigation control in the presence of salinity: extended linear quadratic approach.**

WRERA0. Bras, R.L. Seo, D.U. Washington, D.C. : American Geophysical Union. Water resources research. July 1987. v. 23 (7). p. 1153-1161. ill. Includes references. (NAL Call No.: DNAL 292.8 W295).

1810

**Irrigation management and root and stalk rot of corn.**

PLDRA. Sumner, D.R. Hook, J.E. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1985. v. 69 (3). p. 239-243. Includes 21 references. (NAL Call No.: DNAL 1.9 P69P).

1811

**Management of root-knot nematodes by phenamiphos applied through an irrigation simulator with various amounts of water.**

JONEB. Johnson, A.W. Young, J.R.; Wright, W.C. Raleigh, N.C. : Society of Nematologists. Journal of nematology. July 1986. v. 18 (3). p. 364-369. Includes 13 references. (NAL Call No.: DNAL QL391.N4J62).

1812

**The relative risk efficiencies of alternative tillage practices for irrigated corn production.**

Tew, B.V. Rafsnider, G. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-2531). 19 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1813

**The risk and return with deficit irrigation.**

Martin, D. Van Brocklin, J. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-2594). 28 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

# FOOD SCIENCE, FIELD CROP

1814

## **Agriculture in the South: conservation's challenge.**

JSWCA3. Healy, R.G. Sojka, R.E. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Mar/Apr 1985. v. 40 (2). p. 189-194. Includes 29 references. (NAL Call No.: DNAL 56.8 J822).

1815

## **Economics of winter cover crops as a source of nitrogen for no-till corn.**

JSWCA3. Frye, W.W. Smith, W.G.; Williams, R.J. Ankeny, Iowa : Soil Conservation Society of America. Journal of soil and water conservation. Mar/Apr 1985. v. 40 (2). p. 246-248. Includes 11 references. (NAL Call No.: DNAL 56.8 J822).

1816

## **Projected costs and returns cotton, soybeans, corn, milo and wheat-- Red River and central areas-- Louisiana, 1986.**

LAXDA. Lavergne, D.R. Paxton, K.W. Baton Rouge, La. : The Station. D.A.E. research report - Department of Agricultural Economics and Agribusiness, Louisiana State University, Louisiana Agricultural Experiment Station. Jan 1986. (644). 50 p. (NAL Call No.: DNAL 100 L935).

1817

## **Projected costs and returns cotton, soybeans, rice, corn, milo and wheat, northeast Louisiana, 1986.**

LAXDA. Paxton, K.W. Lavergne, D.R.; Zacharias, T.; McManus, B. Baton Rouge, La. : The Station. D.A.E. research report - Department of Agricultural Economics and Agribusiness, Louisiana State University, Louisiana Agricultural Experiment Station. Includes statistical data. Jan 1986. (645). 93 p. maps. (NAL Call No.: DNAL 100 L935).

1818

## **The shrinkage of shelled corn while in cars in transit /by J.W.T. Duval and Laurel Duval.**

Duval, J. W. T. 1873-1946. Duval, Laurel. Washington, D.C. : U.S. Dept. of Agriculture, 1913. Caption title.~ "December 19, 1913.". 21 p. : ill. ; 24 cm. (NAL Call No.: DNAL 1 Ag84B no.48).

1819

## **Some preliminary results of estimating the impacts of research investment on corn, wheat and sorghum.**

MXMRA. Otto, D. Havlicek, J. Jr. St. Paul, Minn. : The Station. Extract: The objective of this study is to further disaggregate these commodity groupings of Bredahl and Peterson into individual commodities and to begin investigating the impact of interregional research "spillovers." Case studies of corn, wheat, and sorghum are made, using individual states as observation units over the time period for which research data on individual commodities are available. The empirical results presented in this paper are the results of some first attempts at estimation. Further work is being done to improve specification of variables measuring weather, cash inputs, risk, and other factors influencing yield response of grain commodities. A special cross sectional-time series algorithm is used in parameter estimation. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. Papers presented at a Symposium sponsored by NC-148, Minneapolis, MN, May 12-13, 1980.~ Includes statistical data. May 12-13, 1980. (8-1981). p. 71-75. Includes 12 references. (NAL Call No.: DNAL S1.M52).

# FOOD PROCESSING, FIELD CROP

1820

**Effects of moisture content, temperature, and test variables on results with grain breakage testers (Corn, Zea mays, handling damage).**  
Herum, F.L. Blaisdell, J.L. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1981. Paper presented at the 1981 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1981. (fiche no. 81-3030). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1821

**Nature and extent of grain damage caused by pneumatic conveying systems (Corn, grain dust).**  
Magee, K.J. Stroschine, R.L.; Foster, G.H.; Baker, K.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-3508). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1822

**Stress cracks and breakage in artificially dried corn / by Ralph A. Thompson and George H. Foster .**  
Thompson, Ralph A., 1934-. Foster, George H., 1917-. Washington, D.C. : U.S. Dept. of Agriculture, Agricultural Marketing Service, Transportation and Facilities Research Division, 1963. Cover title.~ "October 1963.". 24 p. : ill. ; 26 cm. (NAL Call No.: DNAL 1 Ag84Mr no.631).

# FOOD PROCESSING, HORTICULTURAL CROP

1823

**A centrifugal impactor for damage  
susceptibility evaluation of shelled corn.**  
Singh, S.S. Finner, M.F. St. Joseph, Mich. :  
The Society. Transactions of the ASAE -  
American Society of Agricultural Engineers.  
Nov/Dec 1983. v. 26 (6). p. 1858-1863. ill.  
Includes references. (NAL Call No.: 290.9  
AM32T).

# FOOD STORAGE, FIELD CROP

1824

**Distribution and retention of fumigant components in shelled corn in 3,250-bushel metal bins / by Charles L. Storey, James K. Quinlan and Loren I. Davidson .**  
Storey, Charles L., 1930-. Quinlan, James K., 1928-; Davidson, Loren I. Washington, D.C. : Agricultural Research Service, U.S. Dept. of Agriculture, 1970. Cover title.~ "Issued December 1970.". iv, 12 p. : ill. ; 26 cm.  
Bibliography: p. 12. (NAL Call No.: DNAL 1 Ag84Mr no.897).

1825

**Evaluation of malathion, synergized pyrethrum, and diatomaceous earth on shelled corn as protectants against insects in small bins / by Delmon W. La Hue .**  
La Hue, D. W. 1911-. Washington, D.C. : Agricultural Research Service, U.S. Dept. of Agriculture, 1966. Cover title. 10 p. ; 26 cm.  
Includes bibliographical references. (NAL Call No.: DNAL 1 Ag84Mr no.768).

1826

**The infestation of corn ears by the European corn borer, and cribbed corn as an auxiliary source of infestation /by L.H. Patch.**  
Patch, L. H. 1896-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. Caption title. 8 p. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.275).

1827

**The survival of European corn-borer larvae in barns and other storage places /L.B. Scott and L.H. Patch.**  
Scott, L. B. 1888-. Patch, L. H. 1896-. Washington, D.C. : U.S. Dept. of Agriculture, 1933. Caption title.~ "Contribution from Bureau of Entomology.". 7 p. ; 23 cm. (NAL Call No.: DNAL 1 Ag84C no.281).

1828

**Tests with malathion and methoxychlor protective treatments for shelled corn stored in metal bins in the Southeast / by Herbert Womack and D.W. La Hue .**  
Womack, Herbert, 1929-. La Hue, D. W. (Delmon William), 1911-. Washington, D.C. : Marketing Research Division, Agricultural Marketing Service, U.S. Dept. of Agriculture, 1959. "August 1959.". 11 p. ; 26 cm. (NAL Call No.: DNAL 1 Ag84Mr no.357).

# FOOD STORAGE, HORTICULTURAL CROP

1829

**Evaluation of lindane for the protection of stored wheat and shelled corn from insect attack / by H.H. Walkden and Howard D. Nelson .**  
Walkden, H. H. 1893-. Nelson, Howard D., 1913-.  
Washington, D.C. : Marketing Research Division,  
Agricultural Marketing Service, U.S. Dept. of  
Agriculture, 1958. Cover title.~ "June 1958."  
iv, 27 p. : ill. ; 26 cm. (NAL Call No.: DNAL 1  
Ag84Mr no.234).

1830

**Evaluation of synergized pyrethrum for the control of Indian-meal moth in stored shelled corn / by James K. Quinlan and Robert F. Miller .**  
Quinlan, James K., 1928-. Miller, Robert  
F., 1933-. Washington, D.C. : Marketing  
Research Division, Agricultural Marketing  
Service, U.S. Dept. of Agriculture, 1958. Cover  
title.~ "March 1958." 13 p. : ill. ; 26 cm.  
(NAL Call No.: DNAL 1 Ag84Mr no.222).

1831

**Treatments for the protection of stored southern-grown corn from rice weevil attack exploratory tests / by D.W. La Hue, Herbert Womack, and B.W. Clements, Jr. .**  
La Hue, D. W. 1911-. Womack, Herbert, 1929-;  
Clements, B. W. 1927-. Washington, D.C. :  
Marketing Research Division, Agricultural  
Marketing Service, U.S. Dept. of Agriculture,  
1958. Cover title.~ "September 1958." 20 p. :  
ill. ; 26 cm. (NAL Call No.: DNAL 1 Ag84Mr  
no.272).

# FOOD CONTAMINATION AND TOXICOLOGY

1832

**Cyclopiazonic acid production by cultures of *Aspergillus* and *Penicillium* species isolated from dried beans, corn meal, macaroni, and pecans.**

JANCA2. Trucksess, M.W. Mislivec, P.B.; Young, K.; Bruce, V.R.; Page, S.W. Arlington, Va. : The Association. Association of Official Analytical Chemists journal. Jan/Feb 1987. v. 70 (1). p. 123-126. Includes references. (NAL Call No.: DNAL 381 AS7).

1835

**Use of ten gram samples of corn for determination of mycotoxins.**

JANCA2. Francis, O.J. Jr. Ware, G.M.; Carman, A.S.; Kirschenheuter, G.P.; Kuan, S.S. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. Jan/Feb 1988. v. 71 (1). p. 41-43. Includes references. (NAL Call No.: DNAL 381 AS7).

1833

**Effects of food processing on mycotoxins.**

JFPRDR. Scott, P.M. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Extract: Most data on mycotoxin contamination applies to agricultural products, such as grains, and could be used to assess human dietary intake of mycotoxins if the effects of food processing, storage and home cooking were known. Several factors-the nature of the process, the food matrix, moisture content of the foodstuff, additives, and mode and level of contamination-can affect experimental results on the decomposition or loss of mycotoxins during food processing. Additionally, the various mycotoxins that have been studied possess wide difference in stability. For example, during the making of bread from wheat flour, up to 100% of ergot alkaloids are destroyed, whereas vomitoxin is stable. Most research on processing of foods containing mycotoxins has been carried out with the aflatoxins, including studies on the sorting and roasting of peanuts, cleaning and milling of corn, the various stages in making vegetable oils, storage and cooking of meat, cooking of corn products, breadmaking, and (for aflatoxin M) the processing of milk and cheese. In general, aflatoxins are moderately stable during roasting processes and persist into finished foods, such as peanut butter. Ochratoxin A patulin, and vomitoxin and other trichothecenes have also received considerable attention. Little information is available on conversion products of mycotoxins during food processing. (Author). Journal of food protection. June 1984. v. 47 (6). p. 489-499. charts. Includes 118 references. (NAL Call No.: DNAL 44.8 J824).

1834

**Simple, rapid cleanup method for analysis of aflatoxins and comparison with various methods.**

JANCA2. Kamimura, H. Nishijima, M.; Yasuda, K.; Ushiyama, H.; Tabata, S.; Matsumoto, S.; Nishima, T. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. May/June 1985. v. 68 (3). p. 458-461. Includes 9 references. (NAL Call No.: DNAL 381 AS7).

# FOOD CONTAMINATION, FIELD CROP

1836

**Aflatoxin contamination of corn hybrids in Alabama.**  
CECHAF. Davis, N.D. Currier, C.G.; Diener, U.L. St. Paul, Minn. : American Association of Cereal Chemists. Cereal chemistry. Nov/Dec 1986. v. 63 (6). p. 467-470. Includes references. (NAL Call No.: DNAL 59.8 C33).

1837

**Aflatoxin estimation in corn by measurement of bright greenish-yellow fluorescence in aqueous extracts.**  
JFPRDR. Lillehoj, E.B. Jacks, T.J.; Calvert, O.H. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Aug 1986. v. 49 (8). p. 623-626. Includes references. (NAL Call No.: DNAL 44.8 J824).

1838

**Ammoniation of aflatoxin-containing corn: distribution, in vivo covalent deoxyribonucleic acid binding, and mutagenicity of reaction products.**  
JAFCAU. Schroeder, T. Zweifel, U.; Sagelsdorff, P.; Friederich, U.; Luthy, J.; Schlatter, C. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Mar/April 1985. v. 33 (2). p. 311-316. Includes references. (NAL Call No.: DNAL 381 J8223).

1839

**Carbon dioxide and aflatoxin production in high-moisture corn treated with potassium sorbate.**  
CECHAF. Lee, S.J. Hanna, M.A.; Bullerman, L.B. St. Paul, Minn. : American Association of Cereal Chemists. Cereal chemistry. Mar/Apr 1986. v. 63 (2). p. 82-85. Includes 19 references. (NAL Call No.: DNAL 59.8 C33).

1840

**Carbon dioxide production and mold growth in stored corn.**  
Fernandez, A. Stroshine, R.; Tuite, J. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3016). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1841

**Chemical survey methods for mycotoxins.**  
Shotwell, O.L. Orlando, Fla. : Academic Press, 1986. Modern methods in the analysis and structural elucidation of mycotoxins / edited by Richard J. Cole. Literature review. p. 51-94. Includes references. (NAL Call No.: DNAL QP632.M9M63).

1842

**Comparison of particulate air samplers for detection of airborne Aspergillus flavus spores.**  
JFPRDR. Silas, J.C. Harrison, M.A.; Carpenter, J.A.; Floyd, J.B. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Mar 1986. v. 49 (3). p. 236-238. ill. Includes references. (NAL Call No.: DNAL 44.8 J824).

1843

**Contaminant residues on corn dried by combustion gases from biomass furnaces.**  
Jacko, R.B. Foster, G.H.; Barrett, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3523). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1844

**Corn quality during barge shipment (Moisture, fine material, breakage susceptibility, kernel infection, fungal propagules, seed germination, food spoilage, storage mold infection).**  
DeHoff, T.W. Stroshine, R.; Tuite, J.; Baker, K. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Jan/Feb 1984. v. 27 (1). p. 259-264. Includes references. (NAL Call No.: 290.9 AM32T).

1845

**Correlation of Zn<sup>2+</sup> content with aflatoxin content of corn.**  
APMBA. Failla, L.J. Lynn, D.; Niehaus, W.G. Jr. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. July 1986. v. 52 (1). p. 73-74. Includes 11 references. (NAL Call No.: DNAL 448.3 AP5).

## (FOOD CONTAMINATION, FIELD CROP)

1846

**Detection of aflatoxin D1 in ammoniated corn by mass spectrometry-mass spectrometry.**  
APMBA. Grove, M.D. Plattner, R.D.; Peterson, R.E. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. Dct 1984. v. 48 (4). p. 887-889. Includes 11 references. (NAL Call No.: DNAL 448.3 AP5).

1847

**Distribution of ethylene dibromide residues in whole corn and milled corn products.**  
CECHAF. Anderson, R.A. Peplinski, A.J.; Storey, C.L.; Bookwalter, G.N.; Black, L.T. St. Paul, Minn. : American Association of Cereal Chemists. Cereal chemistry. May/June 1985. v. 62 (3). p. 198-200. Includes references. (NAL Call No.: DNAL 59.8 C33).

1848

**Effects of processing on aflatoxin levels and on mutagenic potential of tortillas made from naturally contaminated corn.**  
JFDAZ. Price, R.L. Jorgensen, K.V. Chicago, Ill. : Institute of Food Technologists. Journal of food science. Mar/Apr 1985. v. 50 (2). p. 347-349, 357. Includes references. (NAL Call No.: DNAL 389.8 F7322).

1849

**Establishment of residue analysis of propanil (Dichloropropionanilide), linuron and diphenamide in agricultural commodities.**  
JFPRDR. Ito, Y. Suzuki, H.; Ogawa, S.; Iwaida, M. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Apr 1985. v. 48 (4). p. 320-324. ill. Includes 6 references. (NAL Call No.: DNAL 44.8 J824).

1850

**High-performance thin-layer chromatographic determination of deoxynivalenol, fusarenon-X, and nivalenol in barley, corn, and wheat.**  
JAFCAU. Trucksess, M.W. Flood, M.T.; Mossoba, M.M.; Page, S.W. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1987. v. 35 (4). p. 445-448. Includes references. (NAL Call No.: DNAL 381 J8223).

1851

**Method of analysis for deoxynivalenol and zearalenone from cereal grains (Toxins in maize, wheat, oats, rice, and barley).**  
Bennett, G.A. Megalla, S.E.; Shotwell, D.L. Champaign, Ill. : The Society. Journal of the American Oil Chemists' Society. Sept 1984. v. 61 (9). p. 1449-1451. Includes 10 references. (NAL Call No.: 307.8 J82).

1852

**Modification of the rapid screening method for aflatoxin in corn for quantitative use.**  
JANCA2. Spilmann, J.R. Jr. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. May/June 1985. v. 68 (3). p. 453-456. Includes references. (NAL Call No.: DNAL 381 AS7).

1853

**Preharvest aflatoxin contamination: effect of moisture and substrate variation in developing cottonseed and corn kernels.**  
APMBA. Lillehoj, E.B. Wall, J.H.; Bowers, E.J. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. Mar 1987. v. 53 (3). p. 584-586. Includes references. (NAL Call No.: DNAL 448.3 AP5).

1854

**Preharvest aflatoxin contamination of dent corn in Indiana in 1983 (Aspergillus flavus).**  
Tuite, J. Sensmeier, R.; Koh-Knox, C.; Noel, R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dct 1984. v. 68 (10). p. 893-895. Includes 19 references. (NAL Call No.: 1.9 P69P).

1855

**Production of deoxynivalenol and zearalenone by isolates of Fusarium graminearum Schw.**  
JFPRDR. Megalla, S.E. Bennett, G.A.; Ellis, J.J.; Shotwell, D.L. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Dct 1987. v. 50 (10). p. 826-828, 831. Includes references. (NAL Call No.: DNAL 44.8 J824).

1856

**Radioimmunoassay of deoxynivalenol in wheat and corn.**  
JANCA2. Xu, Y.C. Zhang, G.S.; Chu, F.S. Arlington, Va. : The Association. Association of Official Analytical Chemists journal. Nov/Dec 1986. v. 69 (6). p. 967-969. Includes references. (NAL Call No.: DNAL 381 AS7).

1857

**Rapid quantitation and confirmation of aflatoxins in corn and peanut butter, using a disposable silica gel column, thin layer chromatography, and gas chromatography/mass spectrometry.**

JANCA2. Trucksess, M.W. Brumley, W.C.; Nesheim, S. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. Sept/Oct 1984. v. 67 (5). p. 973-975. ill. Includes 8 references. (NAL Call No.: DNAL 381 AS7).

1858

**Role of selected corn insects and plant stress in aflatoxin production in Kentucky corn.**

TKASAT. Rodriguez, J.G. Patterson, C.G.; Potts, M.F.; Poneleit, C.G.; Beine, R.L. Louisville, K.Y. : The Academy. Transactions of the Kentucky Academy of Science. Sept 1984. v. 45 (3/4). p. 138-143. Includes 10 references. (NAL Call No.: DNAL 500 K41).

1859

**Screening and quantitation of ochratoxin A in corn, peanuts, beans, rice, and cassava.**

JANCA2. Valente Soares, L.M. Rodriguez-Amaya, D.B. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. Nov/Dec 1985. v. 68 (6). p. 1128-1130. Includes 21 references. (NAL Call No.: DNAL 381 AS7).

1860

**Stimulation by *Hyphopichia burtonii* and *Bacillus amyloliquefaciens* of aflatoxin production by *Asperillus flavus* in irradiated maize and rice grains.**

APMBA. Cuero, R.G. Smith, J.E.; Lacey, J. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. May 1987. v. 53 (5). p. 1142-1146. Includes references. (NAL Call No.: DNAL 448.3 AP5).

1861

**Study of corn quality during barge shipment.**

DeHoff, T.W. Stroshine, R.; Tuite, J.; Baker, K. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3015). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

# FOOD CONTAMINATION, HORTICULTURAL CROP

1862

**Determination of musty odor compounds produced by *Streptomyces griseus* and *Streptomyces odorifer*.**

JFDAZ. Abo Gnah, Y.S. Harris, N.D. Chicago, Ill. : Institute of Food Technologists. Journal of food science. Jan/Feb 1985. v. 50 (1). p. 132-135. Includes references. (NAL Call No.: DNAL 389.8 F7322).

1863

**Establishment of residue analysis of propanil (Dichloropropionanilide), linuron and diphenamide in agricultural commodities.**

JFPRDR. Ito, Y. Suzuki, H.; Ogawa, S.; Iwaida, M. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Apr 1985. v. 48 (4). p. 320-324. ill. Includes 6 references. (NAL Call No.: DNAL 44.8 J824).

1864

**Production of zearalenone and deoxynivalenol in commercial sweet corn.**

PLDRA. Hart, L.P. Braselton, W.E. Jr.; Stebbins, T.C. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1982. v. 66 (12). p. 1133-1135. Includes references. (NAL Call No.: DNAL 1.9 P69P).

# FOOD COMPOSITION, FIELD CROP

1865

**Effect of seeding date, plant density, moisture availability and soil nitrogen fertility on maize kernel breakage susceptibility.**

CRPSAY. Bauer, P.J. Carter, P.R. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1986. v. 26 (6). p. 1220-1226. Includes references. (NAL Call No.: DNAL 64.8 C883).

1866

**Evaluation of particulate air samplers for airborne aflatoxin B1.**

JTEHD6. Silas, J.C. Harrison, M.A.; Carpenter, J.A. Washington, D.C. : Hemisphere Publishing. Journal of toxicology and environmental health. 1986. v. 18 (2). p. 215-220. Includes references. (NAL Call No.: DNAL RA565.A1J6).

# FOOD COMPOSITION, HORTICULTURAL CROP

1857

**Determination of musty odor compounds produced by *Streptomyces griseus* and *Streptomyces odorifer*.**

JFDAZ. Abo Gnah, Y.S. Harris, N.D. Chicago, Ill. : Institute of Food Technologists. Journal of food science. Jan/Feb 1985. v. 50 (1). p. 132-135. Includes references. (NAL Call No.: DNAL 389.8 F7322).

1868

**Effect of deficit irrigation on yield and quality of sweet corn.**

JOSHB. Braunworth, W.S. Jr. Mack, H.J. Alexandria, Va. : The Society. Journal of the American Society for Horticultural Science. Jan 1987. v. 112 (1). p. 32-35. Includes 18 references. (NAL Call No.: DNAL 81 S012).

# FEED PROCESSING AND STORAGE

1869

**A centrifugal impactor for damage susceptibility evaluation of shelled corn.**

Singh, S.S. Finner, M.F. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1983. v. 26 (6). p. 1858-1863. ill. Includes references. (NAL Call No.: 290.9 AM32T).

1870

**Effects of moisture content, temperature, and test variables on results with grain breakage testers (Corn, Zea mays, handling damage).**

Herum, F.L. Blaisdell, J.L. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1981. Paper presented at the 1981 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1981. (fiche no. 81-3030). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1871

**Fate of herbicide-derived aniline residues during ensilage.**

BECTA, Lyons, C.D. Katz, S.E.; Bartha, R. New York, N.Y. : Springer-Verlag. Bulletin of environmental contamination and toxicology. Nov 1985. v. 35 (5). p. 704-710. Includes references. (NAL Call No.: DNAL RA1270.P35A1).

1872

**Improving low temperature drying using mold resistant hybrids.**

Friday, D.C. Stroshine, R.L.; Tuite, J. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-3010). 19 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

# FEED CONTAMINATION TOXICOLOGY

1873

**Aflatoxin estimation in corn by measurement of bright greenish-yellow fluorescence in aqueous extracts.**

JFPRDR. Lillehoj, E.B. Jacks, T.J.; Calvert, O.H. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Aug 1986. v. 49 (8). p. 623-626. Includes references. (NAL Call No.: DNAL 44.8 J824).

1874

**Aflatoxin in southeastern corn.**

Nichols, T.E. Jr. College Park : The Conference. Proceedings - Maryland Nutrition Conference for Feed Manufacturers. 1983. p. 66-73. Includes references. (NAL Call No.: DNAL 389.9 UN342).

1875

**Analysis of the 1986 corn and wheat crops for deoxynivalenol and zearalenone.**

Hart, L.P. East Lansing, Mich. : The Station. Research report - Michigan State University, Agricultural Experiment Station. Sept 1987. (487). p. 156-157. Includes references. (NAL Call No.: DNAL 284.9 M58).

1876

**Carbon dioxide and aflatoxin production in high-moisture corn treated with potassium sorbate.**

CECHAF. Lee, S.J. Hanna, M.A.; Bullerman, L.B. St. Paul, Minn. : American Association of Cereal Chemists. Cereal chemistry. Mar/Apr 1986. v. 63 (2). p. 82-85. Includes 19 references. (NAL Call No.: DNAL 59.8 C33).

1877

**Carbon dioxide production and mold growth in stored corn.**

Fernandez, A. Stroshine, R.; Tuite, J. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3016). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1878

**Chemical survey methods for mycotoxins.**

Shotwell, O.L. Orlando, Fla. : Academic Press. 1986. Modern methods in the analysis and structural elucidation of mycotoxins / edited by Richard J. Cole. Literature review. p. 51-94. Includes references. (NAL Call No.: DNAL QP632.M9M63).

1879

**Comparison of particulate air samplers for detection of airborne Aspergillus flavus spores.**

JFPRDR. Silas, J.C. Harrison, M.A.; Carpenter, J.A.; Floyd, J.B. Ames, Iowa : International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Mar 1986. v. 49 (3). p. 236-238. ill. Includes references. (NAL Call No.: DNAL 44.8 J824).

1880

**Contaminant residues on corn dried by combustion gases from biomass furnaces.**

Jacko, R.B. Foster, G.H.; Barrett, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3523). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1881

**Correlation of Zn<sup>2+</sup> content with aflatoxin content of corn.**

APMBA. Failla, L.J. Lynn, D.; Niehaus, W.G. Jr. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. July 1986. v. 52 (1). p. 73-74. Includes 11 references. (NAL Call No.: DNAL 448.3 AP5).

1882

**Detection of aflatoxin D1 in ammoniated corn by mass spectrometry-mass spectrometry.**

APMBA. Grove, M.D. Plattner, R.D.; Peterson, R.E. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. Oct 1984. v. 48 (4). p. 887-889. Includes 11 references. (NAL Call No.: DNAL 448.3 AP5).

1883

**Detoxification of aflatoxin-contaminated corn makes grain safe for feeding.**

HARAA. Diener, U.L. Davis, N.D.; Danilson, D.A. Auburn, Ala. : The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Summer 1985. v. 32 (2). p. 9. maps. (NAL Call No.: DNAL 100 AL1H).

1884

**Detoxification of deoxynivalenol with sodium bisulfite and evaluation of the effects when pure mycotoxin or contaminated corn was treated and given to pigs.**

JAFCAU. Young, J.C. Trenholm, H.L.; Friend, D.W.; Prelusky, D.B. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Mar/Apr 1987. v. 35 (2). p. 259-261. Includes references. (NAL Call No.: DNAL 381 J8223).

1885

**Enzyme-linked immunosorbent assay of aflatoxin B1 in naturally contaminated corn and cottonseed.**

JANCA2. Ram, B.P. Hart, P.; Shotwell, D.L.; Pestka, J.U. Arlington, Va. : The Association. Association of Official Analytical Chemists journal. Sept/Oct 1986. v. 69 (5). p. 904-907. Includes references. (NAL Call No.: DNAL 381 AS7).

1886

**Evaluation of particulate air samplers for airborne aflatoxin B1.**

JTEHD6. Silas, J.C. Harrison, M.A.; Carpenter, J.A. Washington, D.C. : Hemisphere Publishing. Journal of toxicology and environmental health. 1986. v. 18 (2). p. 215-220. Includes references. (NAL Call No.: DNAL RA565.A1J6).

1887

**Fate of herbicide-derived aniline residues during ensilage.**

BECTA. Lyons, C.D. Katz, S.E.; Bartha, R. New York, N.Y. : Springer-Verlag. Bulletin of environmental contamination and toxicology. Nov 1985. v. 35 (5). p. 704-710. Includes references. (NAL Call No.: DNAL RA1270.P35A1).

1888

**High-performance thin-layer chromatographic determination of deoxynivalenol, fusarenon-X, and nivalenol in barley, corn, and wheat.**

JAFCAU. Trucksess, M.W. Flood, M.T.; Mossoba, M.M.; Page, S.W. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1987. v. 35 (4). p.

445-448. Includes references. (NAL Call No.: DNAL 381 J8223).

1889

**Improving low temperature drying using mold resistant hybrids.**

Friday, D.C. Stroschne, R.L.; Tuite, J. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1986 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1986. (fiche no. 86-3010). 19 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1890

**Measurement and distribution of aflatoxin in 1983 Iowa corn.**

Schmitt, S.G. Hurburgh, C.R. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-3533). 20 p. maps. Includes references. (NAL Call No.: DNAL FICHE S-72).

1891

**Modification of the rapid screening method for aflatoxin in corn for quantitative use.**

JANCA2. Spillmann, J.R. Jr. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. May/June 1985. v. 68 (3). p. 453-456. Includes references. (NAL Call No.: DNAL 381 AS7).

1892

**Natural occurrence of deoxynivalenol, 15-acetyl-deoxynivalenol, and zearalenone in refusal factor corn stored since 1972.**

APMBA. Abbas, H.K. Mirocha, C.J.; Tuite, J. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. Apr 1986. v. 51 (4). p. 841-843. Includes 17 references. (NAL Call No.: DNAL 448.3 AP5).

## **(FEED CONTAMINATION TOXICOLOGY)**

**1893**

### **Preharvest aflatoxin contamination of dent corn in Indiana in 1983 (*Aspergillus flavus*).**

Tuite, J. Sensmeier, R.; Koh-Knox, C.; Noel, R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1984. v. 68 (10). p. 893-895. Includes 19 references. (NAL Call No.: 1.9 P69P).

**1894**

### **Production of aflatoxin on corn under controlled environmental conditions.**

Wieman, D.M. White, G.M.; Ross, I.J.; Hicks, C.L.; Taraba, J.L.; Langlois, B.E. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1984 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, Winter 1984. (84-3516). 20 p. Includes references. (NAL Call No.: DNAL FICHE 290.9 AM32P).

**1895**

### **Production of zearalenone and deoxynivalenol in commercial sweet corn.**

PLDRA, Hart, L.P. Braselton, W.E. Jr.; Stebbins, T.C. St. Paul, Minn. : American Phytopathological Society. Plant disease. Dec 1982. v. 66 (12). p. 1133-1135. Includes references. (NAL Call No.: DNAL 1.9 P69P).

**1896**

### **Study of corn quality during barge shipment.**

DeHoff, T.W. Stroshine, R.; Tuite, J.; Baker, K. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3015). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

**1897**

### **Treating aflatoxin contaminated corn with ammonia.**

Hammond, C. Athens, Ga. : The Service. Bulletin - Cooperative Extension Service, University of Georgia, College of Agriculture. Mar 1987. (869). 10 p. ill. (NAL Call No.: DNAL 275.29 G29B).

**1898**

### **Use of ten gram samples of corn for determination of mycotoxins.**

JANCA2. Francis, D.J. Jr. Ware, G.M.; Carman, A.S.; Kirschenheuter, G.P.; Kuan, S.S. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. Jan/Feb 1988. v. 71 (1). p. 41-43. Includes references. (NAL Call No.: DNAL 381 AS7).

# FEED COMPOSITION

1899

**Effect of seeding date, plant density, moisture availability and soil nitrogen fertility on maize kernel breakage susceptibility.**

CRPSAY. Bauer, P.J. Carter, P.R. Madison, Wis.  
: Crop Science Society of America. Crop  
science. Nov/Dec 1986. v. 26 (6). p. 1220-1226.  
Includes references. (NAL Call No.: DNAL 64.8  
C883).

1900

**Measurement and distribution of aflatoxin in 1983 Iowa corn.**

Schmitt, S.G. Hurburgh, C.R. St. Joseph, Mich.  
: The Society. American Society of Agricultural  
Engineers (Microfiche collection). Paper  
presented at the 1985 Winter Meeting of the  
American Society of Agricultural Engineers.  
Available for purchase from: The American  
Society of Agricultural Engineers, Order Dept.,  
2950 Niles Road, St. Joseph, Michigan 49085.  
Telephone the Order Dept. at (616) 429-0300 for  
information and prices. 1985. (fiche no.  
85-3533). 20 p. maps. Includes references. (NAL  
Call No.: DNAL FICHE S-72).

# AGRICULTURAL PRODUCTS - PLANT

1901

**Corncob granules and pelleted carriers: New, controlled, safer methods of handling pesticides.**

Vander Hooven, D.I.B. Philadelphia : American Society for Testing and Materials, c1983. Pesticide formulations and application systems, third symposium : a symposium / sponsored by ASTM Committee E-35 on Pesticides, Fort Mitchell, Ky., 12 Oct 1982 ; T.M. Kaneko, N.B. Akesson, editors. p. 132-140. ill. Includes 45 references. (NAL Call No.: DNAL SB950.93.P47 1983).

1902

**A study of explosive autohydrolysis of corncobs at 240 degrees C.**

Filatova, A.M. Khomenko, N.D.; Glazman, B.A.; Papazov, Yu.G.; Gorelov, A.V.; Evlanova, A.G. New York, N.Y. : Allerton Press. Hydrolysis and wood chemistry USSR. Translated from: *Gidroliznaia i lesokhimicheskaia promyshlennost'*, (6), 1987, p. 3-6. (301.8 G36). 1987. (6). p. 6-12. ill. Includes references. (NAL Call No.: DNAL TS920.H8).

# FOOD SERVICE MANAGEMENT

1903

**Washington and the food business sourcebook of 1982 developments that could affect your business. --.**

Fair Lawn, N.J. : Food Institute, 1983? .

Abstract: A sourcebook for the food industry details the more significant federal regulatory and legislative developments of 1982 regarding food production. These developments are organized into 7 sections, specifically addressing the actions of 6 federal agencies (the Federal Trade Commission, the Department of Justice, FDA, USDA, EPA, and the Interstate Commerce Commission) and the US Congress. Each of these 7 sections includes highlights and supportive documents. Topics include: breakfast cereals, food advertising, regulations on specific foods (e.g., candies, corn syrups, beef, tuna, dairy products), Na labe ling, food additives, nutrition labeling, food grading, pesticides and toxins, truck leasing, food safety and the Prompt Payment Act. (wz). iii, 266 p. ; 28 cm. (NAL Call No.: DNAL HD9000.9.A4).

# DIET AND DIET RELATED DISEASES

1904

**A preliminary study of Kentucky localities in which pellagra is prevalent, having reference to the condition of the corn crop and to the possible presence of an insect or other agent by which the disease spreads.**

KAEBA. Garman, H. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. Jan 15, 1912. (159). p. 1-79. ill., plates. (NAL Call No.: DNAL 100 K41 (2)).

# POLLUTION

1905

**Degradation of terbufos (Counter) soil insecticide in corn fields under conservation tillage practices.**  
BECTA. Felsot, A.S. Bruce, W.N.; Steffey, K.S. New York, N.Y. : Springer-Verlag. Bulletin of environmental contamination and toxicology. Mar 1987. v. 38 (3). p. 369-376. Includes references. (NAL Call No.: DNAL RA1270.P35A1).

1906

**The effect of aggregate response assumptions on environmental impact analyses.**  
Hamilton, S.A. McCarl, B.A.; Adams, R.M. Ames, Iowa : American Agricultural Economics Association. Extract: This paper reports on an investigation of the implications of alternative response assumptions on the estimates of changes in welfare, prices, and production due to environmental alterations. A variety of aggregate response assumptions are examined within a mathematical programming framework using a case example assessment involving the economic effects of air quality changes on agriculture. This type of empirical research is used by the U.S. Environmental Protection Agency (EPA) to evaluate the efficiency of alternative national ambient air quality standards, including acid deposition precursors. Benefits to agriculture are an important category in setting such standards. American journal of agricultural economics. May 1985. v. 67 (2). p. 406-413. Includes 17 references. (NAL Call No.: DNAL 280.8 J822).

1907

**Effects of acid rain on corn silks and pollen germination.**  
JEVQAA. Wertheim, F.S. Craker, L.E. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1988. v. 17 (1). p. 135-138. Includes references. (NAL Call No.: DNAL QH540.J6).

1908

**Effects on wildlife of at-planting corn applications of granular carbofuran.**  
JWMAA9. Balcomb, R. Bowen, C.A.; Wright, D.; Law, M. Bethesda, Md. : Wildlife Society. Journal of wildlife management. Oct 1984. v. 48 (4). p. 1353-1359. Includes references. (NAL Call No.: DNAL 410 J827).

1909

**Evaluation of nitrogen availability indexes for a sludge compost amended soil.**  
JEVQAA. O'Keefe, B.E. Axley, J.; Meisinger, J.U. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1986. v. 15 (2). p. 121-128. Includes references. (NAL Call No.: DNAL QH540.J6).

1910

**Evaluation of particulate air samplers for airborne aflatoxin B1.**  
JTEHD6. Silas, J.C. Harrison, M.A.; Carpenter, J.A. Washington, D.C. : Hemisphere Publishing. Journal of toxicology and environmental health. 1986. v. 18 (2). p. 215-220. Includes references. (NAL Call No.: DNAL RA565.A1J6).

1911

**Identification of the initial metabolites of acetochlor in corn and soybean seedlings.**  
JAFCAU. Breau, E.J. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. Sept/Oct 1986. v. 34 (5). p. 884-888. Includes references. (NAL Call No.: DNAL 381 J8223).

1912

**Metal accumulation in corn and barley grown on a sludge-amended Typic Ochraqualf.**  
JEVQAA. Rappaport, B.D. Martens, D.C.; Reneau, R.B. Jr.; Simpson, T.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1987. v. 16 (1). p. 29-33. Includes references. (NAL Call No.: DNAL QH540.J6).

1913

**Molybdenum accumulation by corn and soybeans from a molybdenum-rich sewage sludge.**  
JEVQAA. Pierzynski, G.M. Jacobs, L.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1986. v. 15 (4). p. 394-398. Includes references. (NAL Call No.: DNAL QH540.J6).

1914

**Pesticide regulatory decisions: production efficiency, equity, and interdependence.**  
Osteen, C. Kuchler, F. New York : John Wiley. Agribusiness, an international journal. Fall 1987. v. 3 (3). p. 307-322. Includes references. (NAL Call No.: DNAL HD1401.A56).

1915

**Plant genetic assays to evaluate complex environmental mixtures.**  
EVSRB. Plewa, M.J. New York : Plenum Press. Environmental science research. Paper presented at the "Symposium on Short-Term Genetic Bioassays in the Evaluation of Complex Environmental Mixtures," 1984, Chapel Hill, North Carolina. 1985. v. 32. p. 45-64. ill. Includes references. (NAL Call No.: DNAL TD172.E55).

## **(POLLUTION)**

**1916**

**Responses and residues in sugarbeets, soybeans, and corn irrigated with 2,4-D or silvex treated water (by V.F. Bruns, B.L. Carlile, and A.D. Kelley). -.**

Bruns, V. F. (Victor Friedrich). Washington, D.C. Agricultural Research Service, U.S. Dept. of Agriculture 1973. 31 p. : ill. --.

Bibliography: p. 30-31. (NAL Call No.: Fiche S-69 no.1476).

**1917**

**Simulated acid rain effects on yield response of two corn cultivars.**

AGJOAT. Banwart, W.L. Porter, P.M.; Hassett, J.J.; Walker, W.M. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1987. v. 79 (3). p. 497-501. Includes references. (NAL Call No.: DNAL 4 AM34P).

**1918**

**Simulated regional variations in pesticide runoff.**

JEVQAA. Haith, D.A. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1986. v. 15 (1). p. 5-8. ill. Includes references. (NAL Call No.: DNAL QH540.J6).

# MATHEMATICS AND STATISTICS

1919

**Agricultural pests as common property: control of the corn rootworm.**

Lazarus, W.F. Dixon, B.L. Ames, Iowa : American Agricultural Economics Association. Extract: Insecticide resistance is an increasingly widespread problem reducing effectiveness and necessitating a switch to more expensive controls. A common property resource model is used to describe potential gain from internalizing resistance externalities through regional coordination. A nonlinear programming model of an Illinois cash grain farm is used to estimate the gain for corn rootworm control where rotation to soybeans is an alternative to insecticide. Switching to rotation as resistance builds causes a relatively minor decrease in profits because soybeans are profitable. Gain from delaying resistance is slight. Co-states give price changes necessary to alter externality production. American journal of agricultural economics. Includes statistical data. Nov 1984. v. 66 (4). p. 456-465. Includes 10 references. (NAL Call No.: DNAL 280.8 J822).

1920

**Design and analysis of competition experiments in stored-product entomology.**

Smith, R.H. Howard, D.C. Manhattan : Kansas State University, 1984. Proceedings of the Third International Working Conference on Stored-Product Entomology : Oct 23-28, 1983, Kansas State Univ., Manhattan, Kansas / spon. Dept. of Entomology and Dept. of Grain Science a. p. 54-67. Includes references. (NAL Call No.: DNAL SB937.I5 1983).

1921

**Determining yield loss by black cutworms on corn (Mathematical model).**

Troester, S.J. Clement, S.L.; Showers, W.B.; Keaster, A.J. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-5026). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1922

**Disease resistance in five cycles of 'BS9' corn synthetic selected for resistance to two generations of European corn borer.**

PHYTAJ. Klenke, J.R. Russell, W.A.; Guthrie, W.D.; Martinson, C.A.; Pedersen, W.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. May 1987. v. 77 (5). p. 735-739. Includes references. (NAL Call No.:

DNAL 464.8 P56).

1923

**The effect of aggregate response assumptions on environmental impact analyses.**

Hamilton, S.A. McCarl, B.A.; Adams, R.M. Ames, Iowa : American Agricultural Economics Association. Extract: This paper reports on an investigation of the implications of alternative response assumptions on the estimates of changes in welfare, prices, and production due to environmental alterations. A variety of aggregate response assumptions are examined within a mathematical programming framework using a case example assessment involving the economic effects of air quality changes on agriculture. This type of empirical research is used by the U.S. Environmental Protection Agency (EPA) to evaluate the efficiency of alternative national ambient air quality standards, including acid deposition precursors. Benefits to agriculture are an important category in setting such standards. American journal of agricultural economics. May 1985. v. 67 (2). p. 406-413. Includes 17 references. (NAL Call No.: DNAL 280.8 J822).

1924

**Integrated pest management strategies for approximately optimal control of corn rootworm and soybean cyst nematode.**

Zacharias, T.P. Grube, A.H. Ames, Iowa : American Agricultural Economics Association. American journal of agricultural economics. Aug 1986. v. 68 (3). p. 704-715. Includes references. (NAL Call No.: DNAL 280.8 J822).

1925

**Managing corn residue to control soil and nutrient losses (Runoff, simulated rainfall plots, conservation tillage).**

Mickelson, S.K. Baker, J.L.; Laflen, J.M. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-2161). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1926

**A modification of Gregory's model for describing plant disease gradients.**

PHYTAJ. Mundt, C.C. Leonard, K.J. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1985. v. 75 (8). p. 930-935. Includes 12 references. (NAL Call No.:

## (MATHEMATICS AND STATISTICS)

DNAL 464.8 P56).

1927

### **Potential bans of corn and soybean pesticides: economic implications for farmers and consumers.**

Osteen, C. Kuchler, F. Washington, D.C. : The Department. Extract: Removing corn and soybean pesticides with alleged environmental and safety risks from the market could increase U.S. agricultural production costs, crop prices, farm incomes, and consumer expenditures, causing farmers to gain and consumers to lose. Banning all triazines, acetanilides, soil insecticides, or seed treatments would have the largest effects. This report uses an econometric-simulation model, incorporating relatively new developments in welfare economics, to analyze the economic implications of potential bans of corn and soybean insecticides, nematocides, fungicides, and herbicides through cost and yield assessments. Banning an individual corn or soybean pesticide would not significantly affect crop production, but banning all pesticides used for an important pest problem would have substantial effects. This study also demonstrates the interdependence among pesticide regulatory decisions. Agricultural economic report - United States Dept. of Agriculture. Apr 1986. (546). 23 p. Includes 21 references. (NAL Call No.: DNAL AGE A281.9 AGBA).

1928

### **The risk and return with deficit irrigation.**

Martin, D. Van Brocklin, J. St. Joseph, Mich. : The Society. American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1985. (fiche no. 85-2594). 28 p. Includes references. (NAL Call No.: DNAL FICHE S-72).

1929

### **Simulated regional variations in pesticide runoff.**

JEVQAA. Haith, D.A. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1986. v. 15 (1). p. 5-8. ill. Includes references. (NAL Call No.: DNAL QH540.J6).

1930

### **Some preliminary results of estimating the impacts of research investment on corn, wheat and sorghum.**

MXMRA. Otto, D. Havlicek, J. Jr. St. Paul, Minn. : The Station. Extract: The objective of this study is to further disaggregate these commodity groupings of Bredahl and Peterson into individual commodities and to begin investigating the impact of interregional research "spillovers." Case studies of corn, wheat, and sorghum are made, using individual states as observation units over the time period for which research data on individual commodities are available. The empirical results presented in this paper are the results of some first attempts at estimation. Further work is being done to improve specification of variables measuring weather, cash inputs, risk, and other factors influencing yield response of grain commodities. A special cross sectional-time series algorithm is used in parameter estimation. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. Papers presented at a Symposium sponsored by NC-148, Minneapolis, MN, May 12-13, 1980.~ Includes statistical data. May 12-13, 1980. (8-1981). p. 71-75. Includes 12 references. (NAL Call No.: DNAL S1.M52).

1931

### **A stochastic dominance comparison of reduced tillage systems in corn and soybean production under risk.**

Klemme, R.M. Ames, Iowa : American Agricultural Economics Association. Extract: Returns per acre of reduced tillage systems including conventional, chisel, till-plant, and no-till are examined under general assumptions concerning risk. These returns are calculated using corn and soybean experimental plot yields. Stochastic dominance rankings indicate an advantage (second degree) of conventional and chisel over no-till when soil loss costs are not assigned. Annual per acre soil loss costs of \$5-15 shift rankings towards the reduced tillage systems. A \$10 per acre cost results from corn yield losses of 0.06% per year (170 bushel per acre yield base) over fifty years with a 5% real discount rate. American journal of agricultural economics. Aug 1985. v. 67 (3). p. 550-562. Includes 14 references. (NAL Call No.: DNAL 280.8 J822).

1932

### **Temporal and spatial analysis of maize dwarf mosaic epidemics.**

PHYTAJ. Madden, L.V. Louie, R.; Knoke, J.K. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Feb 1987. v. 77 (2). p. 148-156. Includes references. (NAL Call No.: DNAL 464.8 P56).

1933

The use of trajectory analysis in projecting the long range migration of the black cutworm (Lepidoptera: Noctuidae) moth into the Midwest. Smelser, R.B. Shaw, R.H.; Showers, W.B. Boston : The Society, 1985. 17th Conference on Agricultural and Forest Meteorology and seventh Conference on Biometeorology and Aerobiology, May 21-24, 1985, Scottsdale, Ariz. : preprint volume / sponsored by the American Meteorological Society. Pest of seedling corn in Iowa. p. 288-291. maps. Includes references. (NAL Call No.: DNAL S600.2.C6 1985).

1934

Value of adult corn rootworm (Coleoptera: Chrysomelidae) population estimates in pest management decision making. JEENAI. Foster, R.E. Tollefson, J.J.; Nyrop, J.P.; Hein, G.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1986. v. 79 (2). p. 303-310. Includes references. (NAL Call No.: DNAL 421 J822).

# DOCUMENTATION

1935

**Semi-automatic survey of crop damage using color infrared photography.**

PERSD. Ladouceur, G. Allard, R.; Ghosh, S. Falls Church, Va. : American Society of Photogrammetry and Remote Sensing. Photogrammetric engineering and remote sensing. Jan 1986. v. 52 (1). p. 111-115. ill. Includes references. (NAL Call No.: DNAL 325.28 P56).

# HUMAN MEDICINE, HEALTH AND SAFETY

1936

**Farm worker exposure to terbufos (phosphorodithioic acid, S-(tert-butylthio) methyl 0,0-diethyl ester) during planting operations of corn.**  
AECTCV. Devine, J.M. Kinoshita, G.B.; Peterson, R.P.; Picard, G.L. New York, N.Y. : Springer-Verlag. Archives of environmental contamination and toxicology. Jan 1986. v. 15 (1). p. 113-119. Includes references. (NAL Call No.: DNAL TD172.A7).

1937

**Insect control: field corn, sorghum and small grain 1986-1987.**  
Moore, L. Barstow, B.; Cotty, S.; Lame, M. Tucson, Ariz. : The Service. Publication - Cooperative Extension Service, University of Arizona, College of Agriculture. 1986. (8615). 11 p. (NAL Call No.: DNAL S544.3.A6C6).

1938

**Nature and extent of grain damage caused by pneumatic conveying systems (Corn, grain dust).**  
Magee, K.J. Strohshine, R.L.; Foster, G.H.; Baker, K.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-3508). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1939

**A preliminary study of Kentucky localities in which pellagra is prevalent, having reference to the condition of the corn crop and to the possible presence of an insect or other agent by which the disease spreads.**  
KAEB. Garman, H. Lexington : The Station. Bulletin - Kentucky, Agricultural Experiment Station. Documents available from: Agriculture Library, Agricultural Science Center - North, University of Kentucky, Lexington, Ky. 40546-0091. Jan 15, 1912. (159). p. 1-79. ill., plates. (NAL Call No.: DNAL 100 K41 (2)).

# TECHNOLOGY

1940

## **Corn belt status report.**

Houston, Tex.? : Aircraft Program Operations, Science Missions and Operations Dept., Lockheed Electronics Company, 1971-. "Earth Observations Aircraft Program" -- cover.~ Each vol. has different phases and missions.~ "NASA contract NAS 9-10950."~ "LEC/HASD no. TWP-71-22."~ "LEC job order 67-2956-7025.". v. : ill. (some folded), maps (some folded) ; 28 cm. (NAL Call No.: DNAL S494.5.R4C62).

1941

## **Molecular technology for studying fungus/plant interactions.**

Yoder, O.C. Turgeon, B.G.; Garber, R.C. Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory, 1985. Plant cell/cell interactions / edited by Ian Sussex ... et al. . Paper presented at a meeting on the topic of plant cell/cell interactions at the Banbury Conference Center of Cold Spring Harbor Laboratory, New York, October 2-4, 1985. 131-135. Includes references. (NAL Call No.: DNAL QK725.P552).

1942

**Results of the 1971 corn blight watch experiment /by R.B. MacDonald ... et al.**  
MacDonald, Robert B. West Lafayette, IN : Laboratory for Applications of Remote Sensing, Purdue University, 1972? . Cover title.~ "LARS Print 100272."~ "Presented at the 8th International Symposium on Remote Sensing of Environment Ann Arbor, Michigan, 1972.". 33 p. : ill. ; 28 cm. Bibliography: p. 17. (NAL Call No.: DNAL SB608.M2R4).

1943

## **Southern corn leaf blight a status report /by Laboratory for Applications of Remote Sensing Staff.**

West Lafayette, Ind. : Purdue University, 1970. Caption title.~ "August 31, 1970.". 5, 11 leaves ; 28 cm. (NAL Call No.: DNAL S494.5.E8S68).

1944

## **1971 corn blight watch experiment data processing, analysis, and interpretation /by Terry L. Phillips and staff. --.**

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